

An evaluation of an educational intervention (physical assessment module), for the non medical work force to provide unscheduled services across the primary and secondary sector in one SHA

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1 Background and Context for the Research

1.1 Introduction

The purpose of this research was to establish how an educational intervention (the physical assessment module) enabled practitioners, drawn from the non medical workforce, to meet the modernising agenda of new ways of working, notably, to provide unscheduled care and to contribute to the transformation of chronic care provision in the acute care sector and Community.

Contemporary health care requires rapid and responsive service development. Successful service development demands that practitioners have been provided with the necessary professional skills and competencies to meet the challenges of any new way of working. Staff retention crises often leave Trusts with few personnel who sustain a corporate memory of lessons learnt from past developments (Miller, Scholes and Freeman, 1998). This can often result in ad hoc development plans which trigger educational need and commissioning without a clear assessment of the skills and competencies required for new roles (Hamilton, 2004). Furthermore, the immediacy of need to provide a service can result in condensed educational programmes to output practitioners as soon as possible without regard to the learning, rehearsal and consolidation necessary to provide confident and competent practitioners (Scholes and Endacott, 2002). A robust evaluation is essential to monitor and evaluate how the roles have been introduced and supported and the associated programme for workforce development so that lessons learned can be identified and inform future initiatives for new ways of working to meet service priorities.

The education module: 'physical assessment' was chosen as it was a key resource in the development of competencies and skills to enable the non-medical workforce to meet the service improvement agenda and service targets set out in the unscheduled care programme. Aims of the programme included: a reduction in the number of emergency bed days; the alignment of emergency services; creating capability to resource services affected by the European working time directive, and to transform the resources for out of hours services and walk in centres. The approach to delivering service improvements harnessed inter professional learning and was a key lever in achieving patient focussed services delivered by a non medical workforce who have been assessed competent to deliver care and carry out substitution roles or delegated tasks.

1.2 Context

The Strategic Health Authority, in partnership with the two local Universities, had developed a physical assessment skills module to equip staff from a range of professional backgrounds with the knowledge and skills necessary for new ways of working and the delivery of innovative services such as nurse led assessment clinics, and in part prepared practitioners for community matron and emergency care practitioner roles. The module was delivered through a work based learning approach as part of a lifelong learning framework at both Universities, using a competency based method.

1.2.1 The Physical Assessment Module

The module was run at level three (degree level) and level M (Master's level). At level three the practitioners developed the skills of physical examination to the point at which they were able to differentiate normal from abnormal findings and make appropriate clinical decisions based on this information. The learners were usually at practitioner or specialist practitioner level, for example district nurses, and practice nurses. At level M, the learners were either in, or preparing for, an advanced practitioner role such as nurse practitioner or community matron. These learners were expected to develop the skills and knowledge to underpin differential diagnosis and to initiate or manage care pathways. Both levels were designed to allow the practitioner to develop skills and knowledge to underpin their personal and professional development to allow them to work in new ways and in new areas.

The physical assessment modules ran over two semesters. In the first, students were taught history taking and discussed the professional and ethical issues relating to new roles for nurses. They also learnt the skills of inspection, palpation, percussion and auscultation as part of the structured physical examination processes needed for assessment of the cardiovascular system, the respiratory system, the gastrointestinal system, the musculo skeletal system, the central and peripheral nervous systems, eyes and ears, skin, and mental health. The assessments were demonstrated and students practised on each other in the relative safety of the classroom. In the second semester students were required to develop their skills in practice under the supervision of a mentor and assemble a practice portfolio demonstrating safe practice for each examination signed by the mentor. The modules were further assessed by means of an essay analysing a physical examination they had carried out that demonstrated their ability to interpret the findings and make clinical decisions appropriate to their role. Students were also required to pass an Objective Structured Physical Examination. In this assessment level three students were required to recognise abnormality and refer for medical opinion or further investigation and at Master's level they were also required to formulate differential diagnoses.

The intention of the work based learning approach, was to enable practitioners to embed their learning into practice immediately (Larsen et al, 2007). This included providing support for both the individual in their personal and professional development, but it was proposed that would also benefit the service as practitioners were be able to work more flexibly and take on new roles. It was timely to evaluate if these learning strategies were effective especially when enabling new staff to accept delegated responsibility for chronic care management and unscheduled care.

1.3 Project Aims

The aims of the research were to:

- Inform service and educational planning and delivery to enable the non medical workforce to acquire competencies in support of service improvement priorities and new ways of working.
- Identify what worked for whom and under what circumstances

From these aims the following research questions were identified:

- How has the Physical Assessment module and course assessment equipped the nurses to undertake their new role?
- How have alumnae (successful course completers) used these skills?
- How do their employers and colleagues help alumnae to consolidate these skills?
- How do the alumnae's skills impact on patient care?
- How do the alumnae contribute to the overall service provided by the multidisciplinary team with whom they work?

1.4 Methodology

To gauge the impact of the physical assessment module on the evolution of competencies to fulfil the demands of new roles in practice a responsive evaluation model was used (Stake, 1975¹; Stake, 2004). This approach seeks to capture the views of a range of stakeholders about the impact of an innovation, in this instance the physical assessment module, and capture in what ways they feel this programme has enabled those who have successfully completed it to fulfil all the demands of their new roles. As this programme sought to enable different staff to work differently in a range of clinical settings, it was crucial to see what worked for whom and under what circumstances. It was critical to deploy a dynamic and responsive approach to capture the process as well as outcome of the initiative, which could reflect the dynamics of change, new policy directives and contextual factors that influenced the implementation of service delivery and new ways of working. Data were gathered from face to face interviews, analysis of relevant documents, and direct observation of working practises. Importantly the approach sought to report findings back into the communities from which these data have arisen to verify the findings but also to enrich and update issues in a rapidly changing context. Therefore, feedback via stakeholder conferences was a critical element in the process.

The sample was made up of stakeholders to capture a range of opinion. Data were gathered from junior as well as senior colleagues and most importantly from patients and their relatives who had been assessed by the nurses (alumnae). Participants were selected because of their role and close involvement with the alumnae. As data were collected they were concurrently analysed. Emergent issues were framed as questions to guide observation and interviewing. In this

¹ Stake R (1975) *Evaluating the arts in education: a responsive approach* Columbus OH: Charles E Merrill

way the evaluation became responsive to the issues that emerged from the data. The aim was to actively seeking divergent opinion about the nurses' roles in undertaking physical assessment. This sample was limited by the time available to undertake the evaluation for the commissioners and was also determined by the funding for the project. The research team strongly believed that they were able to capture greater diversity in opinion and actively sought alternative perspectives from being in the field than could be achieved by survey or questionnaire. This enabled differing opinion to be located to the circumstances and context in which they arose.

We were not seeking to make statistical generalisations from these data. Our aim was to generate an understanding about what worked for whom and under what circumstances. To achieve a balanced exploration of the key issues requires there to be fewer numbers in the total sample, but more detailed, in-depth data that could explain the reality of these nurses' clinical practice and its impact on their colleagues and patients. In the event, the proposed sample of 100 participants was not achieved and the issues that caused this explained in section 1.7. However, the research team were satisfied that they did canvas a sufficient breadth and scope of people in various activities linked to the alumnae to provide a 360 degree perspective on the issues.

1.5 Methods

A responsive evaluation demands multiple methods to capture the dynamics of an innovation and its outcome. Various sources of data were used but primarily consisted of: interviews with all the stakeholders (alumnae, work colleagues, managers, patients and their relatives), observation of patient consultations and the alumnae' at work, and documentary analysis. Outcome measures of the impact of practice were self reported by the alumnae who were required to gather this information as part of on going audit of performance conducted by the Trusts.

1.5.1 Interviewing

All the alumnae who took part in the evaluation were interviewed face to face. The interviews were tape recorded and later transcribed. On request, the transcription of the interview was returned to the participant for verification. The interview was informal and semi structured. Topics covered in the interview included:

Impact of Physical assessment module on personal practice

- How they use the skills, which skills are used regularly which are not
- How physical assessment affects consultations and referrals
- The impact on communicating with medical professionals and other colleagues.
- How this has affected their interactions with patients
- How this has affected their workload
- How this has enabled them to enact the elements of their new role, what works, what doesn't and the factors that create challenges to the use of the techniques learnt on the module.

- Satisfaction with the length and content of the module, levels of supervision, capacity to rehearse the skills under supervision, and the processes by which they were assessed as competent.

Impact of the course on their professional concept

- The process of learning the skills, specific challenges and celebrations in acquiring the skills and attending the module
- The impact this had on their work life balance
- Illustrations of patient contacts that have affected how they view themselves
- Illustrations of how the new skills have affected their relationships with colleagues in the multi disciplinary team.
- Issues around accountability, autonomy and responsibility – levels and sources of support to facilitate them to embrace these aspects.

The majority of their work colleagues were also interviewed face to face, although a few were offered the opportunity to be interviewed by telephone if this was more convenient. The focus of question was similar to the alumnae although the focus was on an outsider looking at the transitions made by the individual as a consequence of undertaking the course. Particular reference was made to any organisational circumstances or issues that would affect the way in which the practitioners were working in the future.

The final group of stakeholders were patients and their relatives. Some patients were interviewed directly, but where requested, were interviewed by telephone.

The telephone interview is an effective way of gathering the views of patients because it gives them greater control over when and for how long they are interviewed (Barriball et al, 1996). This was done in response to recommendations made by the patient advisory panel. The interview agenda was sent in advance so participants could reflect on topics they might wish to raise. The advantages of this approach were numerous: first they allowed for last minute postponement and rebooking in response to workload. Secondly, they could be conducted at a time that was most convenient to the participants, especially when this was out of office hours. Thirdly, once rapport has been established they created an informal atmosphere to enable the discussion to proceed (Barriball et al, 1996). Finally, telephone interviews decrease cost and increase time effectiveness which assures greater acceptability from participants as they take less time than face to face interviews (Smith 2005).

Telephone interviewing was particularly important in the acute care setting because many were suffering from chronic conditions and tired easily. Therefore, to continue with an interview after the initial patient consultation in a clinic would have elongated their time at the hospital and created additional pressures. This approach also ensured that patients and their relatives could consider participation over a longer period and be interviewed at a time when they felt comfortable. Two interviews were rearranged because patients felt too unwell to speak to the researchers on the booked date, but were enthusiastic to take part in the evaluation at a later stage.

The topics covered with patients included:

- What was their experience(s) of the consultation?
- Are they satisfied with the outcome of the consultation? If not, what else did they feel would have been beneficial?
- Do they know who referred them into the service of the practitioner?
- What do they feel they contribute to their care?
- If they have been under the care of other health care professionals how did they feel this consultation compared?
- Are there any other health care professionals they would wish to see?

1.5.2 Observation

The role of non-participant observer was adopted by the researcher. The focus of the observation was on a nurse undertaking a clinical consultation (physical assessment) of a patient. In the main this was done in patient clinics or in the patient's home but in some situations in the acute care setting this involved shadowing the practitioners as they responded to calls throughout the hospital. Shadowing had the additional benefit of observing interactions with the practitioners' colleagues (i.e. with whom she liaised, to whom made referrals, who supported her and how she used her skills to support others). A schedule of the types of activities that were observed in a clinical consultation is found in Appendix 1. The detail of what was observed in each episode was influenced by the nature of the work undertaken by the alumnae. Therefore, the observational schedule acted more as an aide memoire or guide rather than a structured tool.

1.5.3 Ethical issues when observing clinical consultations

The aim was to observe clinical consultations a practitioner had with their patients to identify the way in which the techniques they had learnt on the module were applied to their practice. However, observation of clinical contacts has inherent ethical concerns and the issues are set out here to illustrate the way in which these were handled by the research team.

In the Community, the nurses made scheduled visits. Because the nurse knew the patient's circumstances and condition they were able to identify patients who had the capacity to read the information sheet and make an informed decision about taking part in the study in advance. Therefore, they selected the patients who were approached to take part in the study.

Ensuring patients did not feel coerced into participation and giving adequate assurance that they could withdraw without giving a reason were important. To ensure this, an initial invitation to meet with the research team was posed by the practitioner who worked closely with the patient. Normally this request was made no less than 24 hours before the researcher gained consent for the participants to be observed or interviewed.

To maximise the amount of time the patient had to make a decision about participation, an information sheet was handed to the patient by the nurse and they gained provisional agreement from the patient that they were prepared to either talk to the researcher over the telephone about the research (once again reducing any potential embarrassment for the patient if they decide not to participate), or at their request, to meet with the researcher to discuss the research more fully. On the day of the planned visit, the nurse would once again

check that the patient was in agreement for the researcher to observe the clinical consultation. If the patient was in agreement, written consent was taken by the researcher, after any questions have been answered to the patient's satisfaction and after the researcher was confident that the patients fully understood the implications of taking part in the research.

The exception to this was nurses working in walk in centres. Patients presented on the day they were seeking a consultation and in this instance it was impossible to gain consent after giving the patient 24 hours in which to deliberate over their decision. To overcome this situation the patient's assent was obtained to allow the observation of the clinical consultation. Information was made available in the waiting room (posters, and information sheets) for patients to read. The triage nurse would ascertain if the patient was prepared to meet with the researcher to hear more about the study, and once again this was done to reduce any potential embarrassment the patient might have felt in refusing the researcher directly. The patient was given at least one hour in which to deliberate over the decision to allow the researcher to observe the clinical consultation (the average time from presenting to the centre, being triaged and then being fully assessed by the nurse practitioner). After the observation, retrospective consent was sought to use the observation notes for the purposes of the evaluation. If the patient provisionally agreed to be interviewed this normally took place 24 hours after the clinical consultation. At the patient's request, this took the form of a telephone interview (a recommendation by our service user panel) to reduce inconvenience.

In acute care settings the nurses' case load was less predictable. Wherever possible, we observed a review assessment undertaken by the nurse and in the main these were undertaken in scheduled clinics. Thus we were able to ensure that a patient had a period of 24 hours from hearing about the research and deciding whether or not to take part. However, when observing Outreach nurses, the nurse asked the patient if they would agree to allow the researcher to observe their clinical consultation. The patient's verbal agreement was taken by the researcher, and the nurse countersigned the assent form to confirm this verbal agreement was taken. After the observation, retrospective consent was sought to use the observation notes for the purposes of the evaluation (RCN, Guidelines 2006). These patients were not interviewed at a later stage, but details were left with the patient as to how they might get in touch with the researcher should they wish to (a recommendation by our service user panel). We did observe two situations where a patient was critically unstable, and this was the reason why the Outreach Nurse had been called to make their assessment. In this situation observation of team interactions were recorded away from the patient. No patient data were recorded.

During the period of observation the researchers were specifically sensitive to any evidence of the patient's discomfort at their presence and would withdraw immediately from the interaction. In the process of information sharing, the researcher would stress to the patient that they could ask the researcher to leave if they felt distressed by the events within a consultation, or should they feel uncomfortable in the researcher's presence. Likewise, if a nurse felt her clinical consultation was being adversely affected by having a researcher observing her

interaction she was able to request that the researcher withdraw from the clinical scenario being observed. No such requests were made.

The researchers were experienced nurses and educators. They had worked in complex clinical situations and were used to dealing with patients and or staff who were stressed or in distress. They were conscious of recognising this type of situation and if it had arisen would have left the clinical situation. This action was not required, although one potential observational episode was not used in the evaluation because the patient's condition rapidly deteriorated and it was evident that the patient was dying. In this situation the observation was directed to the interaction of the staff away from the patient's bedside.

1.5.4 Stakeholder conferences

Crucially, the responsive evaluator looks for the impact from a 360 degree perspective (Stake, 2004), i.e. junior and senior colleagues, practitioners from across the multi professional health care team as well as managers and opinion leaders. In the context of this study, many of these participants were identified by the alumnae and then invited to a feedback conference to garner their opinions and to debate the findings. All other participants were invited to the stakeholder conferences. Two were scheduled one at each of the participating Universities to facilitate ease of access. The key findings were presented back to the participants who were then asked to comment on the issues, provide insight into the latest changes experienced (including career trajectories) and discuss the implications of the findings for future practice and transferability of the findings to others who may wish to undertake the physical assessment module. Participation was disappointing and particularly so in one site, where many potential attendees had to send apologies at the last minute due to workload pressures and an inability to absent themselves from work. The presentation on the Community case was better attended and included managers from the PCT.

1.6 Data analysis

Data were analysed using the constant comparative method (Glaser and Strauss, 1967). Data analysis ran concurrently with data collection and as emergent issues arose they were abstracted and the topics explored in subsequent interviews. First level analysis of the alumnae interviews influenced the purposive snowballing selection of key stakeholders (managers, mentors, patients and relatives). At the second stage of analysis, transcripts and notes were sorted and sifted with emergent issues clustered into themes. Data from across the different participants were then compared by theme to identify similarities and differences. Care was always taken to ensure that these data remain linked back to any causal explanations in the context from which they arose (e.g. organisation or profession specific issues).

The evaluation report is written to ensure that key issues are described with sufficient detail to illustrate the circumstances surrounding an outcome but to ensure the anonymity of the participants has not been broken. The purpose is to enable the reader to understand the different perspectives but also the different

circumstances leading to the expressed views. The purpose is to generate analytical generalisations complemented by the descriptive statistics gathered from other sources. In the text, quotes have been selected either because they represent issues expressed by others, or because they explain a unique concern or circumstance for that stakeholder. Summary points provide a conflation of dominant conceptual categories distilled from the interviews.

1.7 Access and recruitment of alumnae

The process of gaining access to participants was particularly problematic in the primary care trusts. Delays were encountered due to the Trusts being subject to reconfiguration and reorganisation that was occurring concurrently with the application process. This meant that identifying the relevant managers was repeatedly stalled by the process of postholder reappointment within newly structured site boundaries. Access into one primary care Trust site took six months. Access into the Acute Care Trusts was unproblematic and facilitated by Senior Nurse Managers on the sites.

The issue of reconfiguration and reorganisation became a major theme throughout data collection and this is addressed in detail in the report. Furthermore, job insecurity and uncertainty about the future roles of some alumnae affected recruitment to the project. This sense of insecurity alongside a concern for the increasing clinical workload and associated pressures on performance did affect some stakeholders' willingness to consent to participate in the study. For some, participation in research was an additional pressure that was considered untenable. This affected the number of participants recruited to the study.

Observation of clinical consultations with participants was rendered problematic in one Acute Care Trust because the alumnae did not consider themselves to be practising the physical assessment skills taught on the module. The factors affecting this outcome are explored in the report. However, in all other sites where alumnae were recruited, observations of clinical consultations were facilitated by post holders and occurred when patients gave their consent.

1.8 Summary of Data Sources

The eventual level of participation is set out in the Table 1

Table 1: Data Sources

	Acute Trusts	Primary Care Trusts	Total
Nurse Participants (Alumnae) interviewed	11	8	19
Observation of pt consultations	8	13	21
Patient Interviews	20	13	33
Relative Interviews	6	3	9
Stakeholders (colleagues)	20	10	30

1.9 Format of the report

The report provides two separate case studies. It was felt that because the issues for the acute and primary care trusts were different it was important to capture the contextual factors that caused this. The final section of the report draws generic implications from both sites and where necessary illuminates specific issues related to the organisational situation.

Chapter 2 provides a brief review of the literature and policy drivers that impact upon the way in which the module was set up and provided.

Chapters 3 and 4 present the two case studies so readers can focus into specific areas of practice and draw out major conclusions. Sign posting to key conceptual findings is made through the use of subheadings to once again facilitate the reader to select specific areas of interest. Each section is furnished with a summary of key points to facilitate comparison.

Chapter 5 provides a summary of the key findings from across the four sites and organises the discussion into three tiers: from theory to practice (learning physical assessment skills and techniques and applying these in practice; from policy to practice (tracking the way in which policy was transmitted from the central government through to organisations and how this impacted on the context in which the practitioners were required to use their skills; and finally from policy to users of the service (examining the evaluation of patients and their relatives about the services provided by nurses undertaking advanced physical assessment skills.

Stakeholders included users of the service, users of the module, multi disciplinary mentors of the students and finally managers. Various orientations meant different criteria were applied to labelling the outcomes of the module as successful or otherwise. Chapter 6 discusses the main theoretical findings from the study, notions of substitution delegation and complementarity, using different theoretical lenses and compares these with findings on similar research reported in the literature. The purpose is to illuminate how success, loss and gain might be constructed when filtered through different disciplinary or theoretical perspectives.

2 Background and Context: a review of the literature

2.1 Introduction

The agenda to change health care provision set out in *The NHS Plan* (DH, 2000 a) and expanded in *More Staff Working Differently* (Department of Health 2002), outlined major redesign in the roles for NHS staff. Significantly, the changes to working hours for doctors in training to comply with European Working Time Directives [EWTDs.] (The Working Time [amendment] Regulations, 2003), resulted in redefining traditional role boundaries across all health care professions, but noticeably blurred those between nursing and medicine.

The Changing Workforce Programme (NHS Modernisation Agency, 2003) led the developments between 2001 – 2005, and developed packages to support managers implementing new roles locally. There was a proliferation of new and advanced roles, especially where they could act as substitutes for doctors (NRU, 2007). These included clinical nurse specialists, nurse practitioners, Consultant nurses and Community Matrons (McKenna, Richey and Keeney (2006). Evaluation of this early work indicated that practitioners in new roles had impacted upon key government targets to increase access and improve service quality for patients (Bridges and Hyde, 2007). Two key areas have emerged where this was particularly evident: in managing chronic care in the community and providing out of hours services.

As new ways of working have emerged the higher education sector has struggled to keep pace with these changes to provide appropriate training and education to equip practitioners with the relevant competencies for the new roles they assume (Hyde et al, 2004; Jones, 2005). This brief review of the literature sets in context the emergence of new roles, with particular emphasis on roles held by staff undertaking the physical assessment module, and the type of preparation required to enable the post holder to undertake comprehensive assessment of their clients/ patients.

2.2 The Community Matron Role

In January 2005 the government launched a new model of care for those suffering from chronic and long-term conditions. Case management, undertaken by Community Matrons, aimed to identify at risk people in the community, improving their physical and psychological well-being, reducing acute exacerbation's of underlying conditions, and avoiding illnesses and accidents. Skills for case management included comprehensive assessment, organising resources and education to enable patients and their carers to maintain independence, reduce hospital admissions and their use of emergency services (National Primary and Care Trust Development Programme, NATPACT, 2005). The role was also envisaged to include 'responsibility for the quality of care, visibility to patients and carers and the authority to act to improve standards' similar to their acute care counterparts in hospitals (Chief Nursing Officer, 2005). In the locality of this research, the SHA set out how they envisaged the role in their *Long Term Conditions Strategy* specifying that the role should be focused toward caring for frail elderly people suffering from chronic conditions, and multiple pathology

associated with ageing, and to link services provided by NHS, Social Services and the Voluntary sector (S&S SHA, 2004).

2.3 Advanced and specialist roles

There has been a proliferation of advanced and specialist roles since 2000, although clinical nurse specialists have been established since 1980 and are therefore more numerous (NRU, 2007). The term 'advanced' or 'specialist' practitioner covers a wide variety of job titles and roles (Read et al, 1999) although these can be divided into five typologies: Nurse Practitioners (NPs), Nurse Consultants, Advanced Nurse Practitioners (ANPs) and specialist nurses (CNS) (Ball, 2005). Broad distinctions in role activity and title identified that Advanced Nurse Practitioners and Nurse Consultants were more likely to undertake diagnostic activities, while clinical nurse specialists and specialist nurses focused on case management (ibid. 2005) while Community Matrons were envisaged to co-ordinate rather than deliver hands on care (Department of Health 2006).

A survey undertaken by the RCN revealed that half the practitioners in advanced or specialist roles worked in hospital, whilst 20% worked in the community and 10% in GP practices. 72% indicated they practised with a high degree of autonomy and had high levels of professional satisfaction. 90% of advanced and specialist nurses conducted patient assessment, made referrals and offered advice (Ball, 2005). 90% of the Nurse Consultants and 91% of the advanced nurse practitioners who responded to the survey identified that they took up a post that had not previously existed (Ball, 2005).

The average age of Consultant Nurses in England was reported to be 40² (Guest et al, 2004). However, the average age profile of specialist nurses was reported as 46 (Hansards, 2007)³. They had on average 16 - 20 years experience of working in the NHS, demonstrated high levels of organisational commitment and considered themselves to be upwardly mobile. This represents a rosy picture that belies the underlying tensions for post holders who struggle to establish themselves in new posts, create appropriate caseloads, assemble adequate data to evidence their impact on services and negotiate their role and relationship (notably referral to, within and across) existing teams (Rolfe and Fulbrook, 1998, Read et al, 1999, Guest et al, 2004; Ball, 2005). Many also have to acquire new skills and knowledge not only of organisational working but also new technical and professional skills to fulfil the ambitions of the posts they hold. Furthermore, some experience high levels of stress associated with the accountability for their autonomous action, often delegated to them by doctors, alongside responsibility for the actions of more junior colleagues acting under their supervision (Price et al, 2000; Guest et al 2004).

² However, the NHS is facing a demographic time bomb within its workforce. More than 100,000 nurses on the Nursing and Midwifery Council register are aged 55 or older and a further 80,000 are 50-55 (Buchan and Seccombe (2006). It has been anticipated that 25,000 nurse will have retired by 2015 (Buchan, 2005).

³ Lords Hansard text for 1 May 2007 01 May 2007 (pt 0014)
<http://www.publications.parliament.uk/pa/ld200607/ldhansrd/text/70501-0014.htm> (accessed on 12.08.08).

The creation of new and advanced roles has created an upward draft of talented nursing staff into such posts. As a consequence this had an effect on the Band 5/6 workforce. The recent 'challenging financial climate' has placed expansion of the health care workforce under pressure, especially in commissioning larger numbers of students (Workforce Review Team, 2005). Therefore, the Workforce Review Team cautioned that short-term financial expediency would make longer term workforce planning 'unreliable' (Ibid, 9). This affects not only the registered workforce but those who are developed to undertake more advanced and specialist roles.

This is not the only threat to the posts. Despite specialist and advanced nurse practitioners demonstrating they have made substantial quality improvements to patient access and satisfaction, they have been subject to rounds of redundancies throughout the country, if their services could be constructed as 'non essential' in a climate of cost savings (Bridges and Hyde, 2007). Furthermore, the type of data generated to support the impact they have made on patient outcomes and service targets take time to generate and often illustrate that the service is cost neutral rather than making explicit savings (Alleyne and Jumaa, 2007; McKenna et al, 2006). This is often the case because new services also illuminate unmet need and therefore increase resource allocation rather than reduce it in the short term (Guest et al, 2004) and secondly, because practitioners are often requested to report on early outputs in a climate of unrelenting rapid change (Alleyne and Jumaa, 2007, NRU 2007) that can be open to statistical misinterpretation.

Ball's survey in 2005 invited respondents to identify the ways in which they would like to see their role developed, 58% (286) identified that they would like to see changes. Factors that inhibited their role development included lack of time, uniqueness of role and therefore no possibility to backfill their position, lack of resources and funding and lack of qualifications or access to suitable courses (Ball, 2005, 41). The final area was experiencing a restrictive culture to role development either by medical colleagues or management. This indicates that many of the ways in which these roles were developing were taking on specific substitution activities. One area where this is most explicit is where nurses in advanced and specialist roles assume responsibility for physical assessment and or prescribing.

2.4 Out of Hours Services & Unscheduled Care

The drive to provide responsive local services in a timely fashion have created opportunities for nurse practitioners and Consultant nurses in acute as well as primary care settings. The types of roles that have emerged here include Hospitals at Night, provided by night nurse practitioners and matrons, Critical Care Outreach Teams (see section 2.6), walk in centres, minor injury centres and emergency nurse practitioners. Here the practitioners assume an explicit substitution role to provide a 24 hour service in the absence of immediate medical cover. These post holders provide direct care to patients and once again audit of their activities has illuminated they make a positive impact on patient outcomes and experience (McKenna et al, 2006). Because practitioner roles tend to be more specific, have clearer role boundaries and can be seen to make a direct impact on patient services in the short term, their long-term survival is considered

to be more likely than strategic consultant roles who may take up to five years to demonstrate the outcomes of their 'pioneering' developments (NRU, 2007).

The specificity and explicit nature of practitioner substitution roles engages them in direct patient assessment, ordering further investigations and planning and delivering relevant interventions, many are also engaged in prescribing. All these activities demand a higher level of skill in undertaking physical assessment as part of a patient consultation, and enhanced specialist knowledge to inform clinical decisions. The review now turns to explore the issues nurses taking on the role of prescribing.

2.5 Prescribing

Advanced clinical roles such as clinical nurse specialist, Nurse Practitioner, modern matron and community matron are at the forefront of health care reforms to deliver a health service that is patient centred (DH 2006a). For community matrons and Nurse Practitioners, the advanced clinical skills they are required to possess include systematic assessment (systematic physical examination), differential diagnosis, treatment planning, and prescribing (AANPE 2006, DH 2005, DH 2006b, RCN 2005) and increasingly these skills are needed in other advanced clinical roles such as night nurse practitioners, critical care outreach and clinical specialists.

A number of recent developments enabled the expansion of nurse prescribing in the UK. In 1994 district nurses and health visitors were permitted to train to prescribe from a limited formulary of products (Latter and Courtenay 2004). From 2002 the introduction of *Extended Formulary Independent Nurse Prescribing (EFNIP)* enabled nurses working in a range of settings such as minor ailments, minor injuries, health promotion and palliative care, to prescribe a wider range of medicines provided they had successfully completed an HEI nurse prescribing course (DH 2002b). Independent nurse and pharmacist prescribing were seen as a way to improve patients' access to medicines (DH 2006c). On 1st May 2006 *Nurse Independent Prescribing*, formerly EFNIP, was expanded so that independent nurse prescribers could prescribe any licensed medicine for any medical condition that they were competent to treat, including some controlled drugs (DH 2006d). Alongside these developments *supplementary prescribing* enabled nurses and pharmacists to prescribe for a patient according to a clinical management plan, provided patients had first been assessed by an independent prescriber (i.e a doctor or dentist). *Patient Group Directives* are a further mechanism by which a named professional can supply a licensed medicine in a particular clinical situation where the patient hasn't been named in advance (DH 2006d).

The number of independent nurse prescribers and limited formulary community prescribers has been slowly rising. In 2002 the government announced plans to increase extended formulary independent nurse prescribers to 10,000 by 2004, allocating £10 million to help with their training (DH 2002c). In 2002 23,000 district nurses, health visitors and practice nurses were able to prescribe from the Nurse Prescribers Formulary (DH 2002b). By 2004, 2000 nurses were Extended Formulary Independent Nurse Prescribers, considerably less than the government

target of 10,000, but in addition 25,000 community nurses could prescribe from the Nurse Prescribers Formulary for district nurses and health visitors (DH 2004). By 2006 there were 7000 Extended Formulary Nurse Prescribers, 6,500 Supplementary Prescribers and 29,000 limited formulary community nurse prescribers (DH 2006e).

2.5.1 Entry Criteria for Independent Prescribing

Nurses eligible to become independent prescribers are first level registered nurses with valid NMC registration and an annotation indicating they have successfully completed a nurse independent prescribing programme (DH 2006c). Employers are required to identify suitable candidates for independent prescribing training and ensure that they gain prescribing experience for the post they are in upon qualification (DH 2006c). Nurses must also demonstrate that they can study at level 3 and have at least three years experience, one of which is in the area for which they will be a prescriber, they must be able to perform comprehensive physical and/or psychological assessments and they must have the support of a medical practitioner who will provide 12 days learning in practice and act as their assessor; they also need confirmation of support from their employer that they will be expected to prescribe upon qualification, that they will have a budget, be working within a clinical governance framework and have access to continuing professional development (DH 2006c). These entry criteria suggest that systematic physical and/or psychological assessment are pre-requisites for prescribing training. However the criteria for diagnostic reasoning skills requirements are less specific.

Norman (2005) reviewed research on clinical reasoning in internal medicine over the past 30 years and concluded that the acquisition of diagnostic reasoning expertise depended on the practitioner having extensive clinical experience so that multiple representations of problems and their solutions (comprising a mix of formal and experiential knowledge) could be stored in memory for recall as required. It seems possible that some practitioners undertaking Independent Prescribing training could have had little experience or preparation in diagnostic reasoning- a concern expressed by the BMA and Avery & Pringle (2005).

2.5.2 The prescribing course.

Higher Education Institutes providing courses leading to independent prescribing for pharmacists and nurses, must follow the standards and curricula developed by the NMC and the Royal Pharmacological Society of Great Britain (RPSGB) (DH 2006c). The course must comprise 26 days in a HEI and 12 days supervised learning in practice. The specific details of curricula are the responsibility of the course commissioner (i.e the strategic health authority) and they must ensure that the course meets the NMC and RPSGB requirements (DH 2006c).

Bradley et al (2006) focused on lecturers' experiences of delivering prescribing courses in HEIs in 8 semi-structured interviews. The lecturers considered that aptitude for a new prescribing role and ability to study at level 3 were not given

sufficient attention by employers and the workforce planning directorates at the selection stage. They thought weighting needed to be given to assessment and communication skills and candidates' specialist practice. They had found a wide range of ability on courses and the amount of preparation students had done was variable. The composition of courses was changing from mainly primary care to a mix of primary care, mental health and secondary care practitioners.

Banning (2004) reported that prescribing students had limited scientific preparation in applied pharmacology and therapeutics; 3 months was too short a period in which to gain the necessary pharmacology and related physical assessment, diagnostic reasoning and critical thinking skills for prescribing. Some practitioners echoed this point because they didn't view the prescribing course as a full preparation for prescribing (Bradley et al 2007).

However, a survey of a random sample of 246 independent prescribers in England reported that the majority had found their initial taught course met their needs (Latter et al 2007). When asked to comment about skills and knowledge that were required in more depth, the respondents replies could be categorised as pharmacology, advanced clinical skills (including examination and diagnosis), practice skills, physical assessment, formulary/BNF and legal issues. Most had received the identified 12 days support of a medical practitioner and had found this beneficial. Two thirds said they had regular support for their prescribing following the course, and almost all were maintaining competencies in prescribing. Around half identified their need for continuing professional development

2.5.3 Factors that promote or hinder nurse prescribing

Factors that appear to promote nurse prescribing include working in primary care (Courtenay et al 2007), gaining experience of prescribing upon qualifying as a prescriber (Bradley et al 2007), having local support particularly from medical teams in initial training and upon qualifying (Bradley et al 2007; Earwicker 2005; Jones et al 2005), a strong academic background (Courtenay et al 2007), access to funding, extensive knowledge of the domain of practice (Courtenay et al 2007; Richmond 2005) and working within the practitioner's scope of practice (Jones et al 2005).

Factors that appear to hinder nurse prescribing include the negative perceptions of some nurses who regard prescribing as an unnecessary skill for their practice (Ryan- Woolley et al 2007), the lack of an integrated computer system for nurse prescribing (Bradley et al 2007; Earwicker 2005), the reluctance of newly qualified prescribers to practise their skills due to a lack of confidence and concerns about the safety of their prescribing practice (Bradley et al 2007). Ongoing mentorship from experienced prescribers would be particularly helpful in practice areas that are less well-defined, for example older adults and learning disability (Bradley et al 2007). Prescribing from the BNF with the large range of drugs available (even as a supplementary prescriber with a clinical management plan) was a source of concern to recently qualified prescribers (Bradley et al 2007). Others reported that

their need for continuing professional development was unmet post qualifying as a prescriber (Courtenay et al 2007).

2.5.4 Safe prescribing

Latter et al (2007b) reported on a study in which transcripts of 12 nurse prescribers' consultations were evaluated by 7 medical prescribing experts. The observed consultations took place in the prescribers' workplace (i.e within their domain of practice). A Medications Appropriateness Index (MAI) developed in advance was used to score the consultations. Data were analysed using descriptive statistics and experts written comments were subjected to qualitative analysis. This study found that nurse prescribers generally made appropriate prescribing decisions.

In contrast, Offredy et al (2007) undertook an exploratory study to examine the pharmacological knowledge and decision making of 25 nurses (18 qualified prescribers and 7 enrolled on a prescribing course). The majority of the participants were educated to degree level and held a diploma as well (76%, 19/25), one had two undergraduate degrees, two were working towards a degree, two held master's degrees and one was working towards a master's degree. Their years of experience were not reported. Four patient scenarios were used and participants did not have access to the BNF. Cognitive Continuum Theory was used in the analysis. The results indicated that prescribers lacked pharmacological knowledge, they tended to use intuitive modes of cognition to reach decisions, and some lacked confidence in prescribing.

2.5.5 Client groups views on prescribing

Latter & Courtenay (2004) in a literature review concluded that patients were generally satisfied with district nurse & health visitor prescribers. Latter et al (2005) reported on findings from a patient questionnaire and found patients were satisfied with information received and viewed nurse prescribing positively, but nearly half also indicated there were problems for which they would prefer to consult with their doctors. Some indicated they would prefer their doctors to do all their prescribing. According to Jones et al (2005) mental health service users perceived nurse prescribers collaborated and focused on treatment options more than doctors. Patients felt listened to, and nurses discussed difficulties they might encounter with their medication and how to minimise risks.

Possession of physical assessment skills and prescribing enables advanced practitioners to work more autonomously to complete episodes of patient care. Many of the issues that relate to physical assessment skills are also common to prescribing. Both have traditionally been medical roles. The course designs in both physical assessment and prescribing include formal and experiential components, but only prescribing has external validation, a national course outline and an NMC recorded qualification. In both cases post course support helps to consolidate skills and practitioners need to use their skills post course to develop confidence. Mentorship is a valued part of both courses, and organisational

support for physical assessment and prescribing are crucial. The limited evidence available suggests that nurses prescribe safely and within the scope of their practice (Latter et al 2005; Latter et al 2007b).

The review now turns to the issue of physical assessment training, the acquisition of knowledge and the need for more educational input to inform this field of practice.

2.6 Physical Assessment

Nurses' capability at undertaking physical assessment has been reported as weak since 1975 (Akinsanya, 1975, Schofield, 1991, Eraut et al 1995). The poverty of anatomy and physiology teaching has been cited as a primary cause (Akinsanya, 1975, Eraut et al, 1995, Scholes et al, 2004). Curriculum content on these subjects has reduced over the years with greater emphasis being placed on self directed learning. Imaginative teaching to apply concepts to clinical practice has also been cited as problematic (Eraut et al, 1995). In part this was because nursing frameworks sought to emphasise the psychosocial aspects of nursing and set itself aside from the 'medical model' (West, 2006). As a consequence, generations of nurses have been under confident in undertaking physical assessment and mentors have paid less attention to this component of practice assessment (Voight, 1980). Thus challenging questions that could expand and deepen the nurses' understanding became assigned to 'college knowledge' that went unchecked (Scholes et al, 2004, p172). The impact mentors had on confirming important components on learning left this aspect of professional knowledge weak and a source of anxiety for teachers, students and mentors (Gresty and Cotton, 2003). This affected fundamental skills of recording biological parameters and the recognition of the significance of the assessment findings. This issue was picked up and remedial curricula interventions set in place on critical care courses (Scholes and Endacott, 2002), but other post qualifying programmes paid less attention to this aspect of knowledge acquisition (West, 2006).

The need for nurses to acquire enhanced physical assessment skills of inspection, palpation, auscultation and percussion (Murray and White, 1999, Jarvis, 2000) requires a deeper understating of pathophysiology and capacity to formulate diagnoses. Invariably most writers link this with advanced nursing roles (Price et al, 2000), but increasingly it is recognised that nurses working with more acutely sick patients in response to advancements in health care technologies, also need these skills (West, 2006). American and Australian nursing curricular have addressed this subject with greater emphasis in pre registration programmes. However, as more nurses in the UK assume autonomous roles, the need for them to undertake systematic physical assessment has been recognised as a necessary skill that extends to those who work outside as well as within critical care environments (West, 2006). For nurses who undertake prescribing this is considered a pre requisite skill (Jeffrey, 2001). The debate as to whether this constitutes the medicalisation of nursing roles or a natural progression of nursing as it responds to changing health care demands persists (Price et al, 2000, Whyte, 2008). However, recent reports highlighting the inadequacy of care

for patients at risk all advocate greater skills in physical assessment and better understanding to inform the recognition of the significance of the assessment findings and timely intervention for all junior health care professionals.

2.7 Recognition of rapid deterioration: the role of outreach nurses and night nurse practitioners.

Recognition of rapid patient deterioration was identified as a problem for nurses and junior doctors (McQuillan et al, 1998; Goldhill et al, 1999; Smith and Poplett, 2002) and the deficiencies were considered to be both organisational (failure to instigate mechanisms and systems to redress the problem) as well as professional (lack of knowledge, supervision and recognition clinical urgency). Changes to critical care services were outlined in *Comprehensive Critical Care* (DH, 2000b) which included the recommendation to introduce Critical Care Outreach Teams (CCOT) who could be called upon to intervene when patients became critically ill in acute care wards (DH, 2000b). Despite their wider introduction in the subsequent five years (Rowan et al, 2007) the problem remained. The National Patient Safety Agency published their report *Safer Care for the Acutely Ill Patient: Learning from Serious Incidents* (NPSA, 2007) alongside the National Institute for Clinical Effectiveness guidelines *Acutely Ill Patients in Hospital: Recognition of and Response to Acute Illness in Hospital* (NICE, 2007) to further reduce the risk of suboptimal care. These latter publications focussed on how the organisation could redress this problem, whilst previous recommendations had attended more on how to improve professional practice and enhance patient safety through improved inter professional working, supervision and education.

To facilitate recognition of significant factors that indicated a patients' deterioration, a variety of tools were devised that highlighted abnormal parameters and triggered a call to the CCOT. These tools, generically termed, Early Warning Scores, took on many guises, but essentially provided abnormal parameters for heart rate, systolic and diastolic blood pressure, respiratory rate, temperature, central nervous system, and urine output that indicated the onset of critical illness. These systems have been adapted since their introduction by Morgan et al (1997) for surgical patients at risk (Stenhouse et al, 2000), and medical patients to detect acute coronary care syndrome (Turley, Smith and Shyam-Sundar, 2006), but essentially were set up to ensure that early warning signs were not 'overlooked, mismanaged or misinterpreted' (Morgan et al, 1997). The purpose was timely referral and intervention, and transfer to higher levels of care where appropriate to reduce morbidity and mortality in this group of patients (Audit Commission, 1999). The role of early warning scores in the NICE guidelines (2007) was restated along with the need for education to ensure that people who record these findings understand their clinical significance. However, the configuration of response to the NICE guidelines was devolved to local interpretation and therefore an opportunity to ensure national parity and equivalence in provision was missed (Scholes, 2007).

CCOT's provided interventions to help stabilise a deteriorating patient and organise transfer to Intensive care or high dependency units. A key aspect of their role was to provide advice and support to ward staff along with education to enable them to retain skills of recognising and acting upon patient deterioration.

However, high staff turnover and the devolvement of recording physical parameters to health care assistants indicated continuing education and training was required to enable staff to use the tools effectively and make timely referrals to the CCOTs (Richardson et al, 2004). Practical skills alongside the need for a 24 hour, 7 day a week service were highlighted. Although the enhancement of clinical skills such as those used by Outreach nurses and greater coverage of knowledge to inform them was advocated in pre registration programmes (Walker, 2001; Scholes et al, 2004), the ambition that Critical Care Outreach Teams would ultimately no longer be needed has not been realised. Indeed, as doctors' in training working hours reduced in line with European Working Time Directives [EWTDs.] (The Working Time [amendment] Regulations, 2003), greater emphasis was placed upon nurses in more advanced roles to provide out of hours services. In part this was done by CCOTs but was supplemented by other night nurse practitioners, especially where the CCOT did not provide a 24 hour service.

First contact and initial assessment skills are a significant element of the delegated and substituted roles in CCOT requiring a different and more comprehensive ability to undertake physical assessment. The knowledge, skills and language of medical assessment were required for both patient assessment and communication of findings to medical teams and these had not previously been taught. Although many outreach nurses used their clinical skills acquired from experience of working in critical care and undertaking post registration critical care courses (Adam, 2004), they felt a need to hone those competencies and refine their systematic assessment skills. Night Nurse practitioners likewise recognised the need to develop their professional knowledge to assume substitution tasks, notably where immediate medical backup was not available. These two categories of practitioners were eager to enlist on the physical assessment module.

2.8 Physical Assessment training

The significant shift in teaching physical assessment skills to nurses is the inclusion of inspection, auscultation, percussion and palpation skills performed as part of a comprehensive or focused system approach to patient assessment (Baid, 2006). Because these skills and underpinning knowledge enable nurses to assume greater responsibility in assessing and making interventions for patients independently, and concomitantly assume legal accountability for their actions, their acquisition is normally directed towards nurses in advanced practice roles (Price and Rutherford, 2000). There are those who advocate that basic physical assessment skills should be taught in pre registration programmes to enable nurses on qualification to meet changing health care demands (Rutherford et al, 1998). However a study undertaken in New Mexico, found that RNs used 30 clinical assessment skills on a regular basis and these primarily were to do with inspection and palpation with auscultation for lung, heart and bowel sounds and not surprisingly varied according to the speciality in which they worked (see table 2.1).

Table 2.1 Physical Assessment Techniques used by RNs in New Mexico on a regular basis (Giddens, 2007).

Core technique
<ul style="list-style-type: none"> • Inspect overall skin colour • Evaluate breathing effort • Assess mental status and level of consciousness • Inspect and palpate extremities for oedema • Palpate extremities for temperature • Palpate and inspect capillary refill • Palpate distal pulses for circulation • Inspect wounds • Auscultate lung sounds • Auscultate abdomen for bowel sounds • Inspect abdomen • Auscultate heart sounds • Inspect skin lesions • Inspect extremities for skin colour and hair growth • Inspect external eyes • Evaluate speech • Palpate abdomen for tenderness and distension • Observe range of motion of joints • Inspect chest shape • Evaluate face for movement and sensation • Palpate extremities for tenderness • Assess muscle strength • Inspect muscles and extremities for size and symmetry • Assess hearing on the basis of conversation • Inspect and examine stool • Assess gait • Assess for PERRLA⁴ • Assess using Glasgow coma scale • Inspect the oral cavity • Inspect the spine

Of the techniques identified above, perhaps the ones that may seem unusual for nurses working outside UK critical care environments are the skills to auscultate heart and lungs. However, the fact that the other range of techniques are not usually applied, with certain skills used more widely used in specialist units relative to patient problems (e.g. surgical, orthopaedic, Accident and Emergency, Stroke Rehabilitation etc.), is perhaps more surprising. However, West (2006) suggests that nurses do minimal assessment associated with recording pulse, temperature, respirations, oxygen saturations, blood pressure, height, weight, urinalysis, skin colour and integrity and mobility. The use of early warning scores to reinforce such a stance is under researched, although research reporting suboptimal care indicates that such observations are poorly conducted and often nurses (and junior doctors) fail to recognise the clinical importance of the findings (McQuillan, 1998, Richardson et al, 2004). The use of electronic recording equipment (e.g. Dynamap) and the delegation of 'observations' to health care assistants, have distanced the nurses from the patient and reduced the amount of physical contact the nurse has to inspect peripheral temperature and skin texture and apply other techniques listed above. The factors

⁴ PERRLA Pupils equal, round, reactive to light and accommodation.

that influence this are associated with lack of time in the acute care setting⁵ (Richardson et al, 2004, Chellel et al, 2006), but are indicative of a declining

component of nursing practice, one that is under assessed and given little value, primarily because it is seen to be a 'medical role' (Schroyen et al, 2005). Therefore, although some nurses might acquire these skills in an ad hoc fashion during their practice experience, they tend to be applied in an unstructured and informal fashion (West, 2006).

To enable nurse to expand their roles to meet the challenges of changing chronic care provision and work force configuration, the acquisition of physical assessment skills for general nurses can be considered an evolving necessity (Price et al, 2000). However, the issue about what is taught to whom and at what depth remains contentious⁶. The range of skills that are to be used *routinely* and the repertoire of skills that can be *drawn upon* to affect decision-making and or differential diagnoses when warranted are at issue (Giddens, 2007). However, a menu of essential and desired clinical competencies helps to focus the curriculum content. For example, in Edmonton Canada, a survey of case managers, nurse administrators and staff development officers ranked assessment of the thorax and lungs, cardio vascular / peripheral vascular systems and abdomen as the top three body systems/ regions that should be covered (Anderson et al, 2001). Whereas, Baid (2006), advocates a thorough head to toe assessment to inform nurses' clinical decision making.

The issue of front loading knowledge (Eraut, 1994) or furnishing students with surplus knowledge they will not apply to their everyday practice can lead to excessive rationalisation of what constitutes core information. Combined with limited time to release students to attend courses and limited resources to fund such programmes can result in over expedient solutions for module content. Academic accreditation for module content can compound this problem (Scholes and Endacott, 1999) as input is filtered according to module hours and what can be reasonably expected for the associated credits. This can be at odds with requests from clinical managers who seek a range of skills and competencies of their practitioners in as short a time as possible to meet rapidly changing service needs (Scholes and Endacott, 2003). Strategies to resolve this are to provide programmes primarily delivered through work based learning (Larsen et al, 2007)⁷, thus ensuring what is taught and applied is relevant to the practitioner's practice (Baid, 2006). However, West (2006) posits that basic theory to underpin skills must be taught and the most appropriate place for this is in college.

It is not only how or where a programme is taught that affects the use of physical assessment skills once a programme of study has been completed. Specific organisational as well as personal/ professional factors affect the outcome. These include: recognition of the relevance of physical assessment skills to the nurses' practice; continuing education to update and advance knowledge and techniques;

⁵ With bed occupancy reported as 98% while research indicates that 85% bed occupancy is optimal for wards to be effective (Whyte, 2008).

⁶ With the on-going debate and concern that nurses are turning themselves into 'mini doctors' at the expense of their provision of care and humanity (Goss, cited by Whyte, 2008).

⁷ Work based learning in this instance is defined as working alongside a mentor for a specified number of hours under direct supervision in practice to acquire skills and then be assessed as competent to use the techniques.

and the opportunity to rehearse or be reassessed as competent by experts (Lesa and Dixon, 2007). Factors cited as inhibitors to the use of physical assessment skills in a literature review conducted by Lesa and Dixon (2007) are set out in Table 2.2.

Table 2.2: Inhibitors to the use of Physical Assessment Skills in practice cited by Lesa and Dixon (2007)

- | |
|---|
| <ul style="list-style-type: none"> • Lack of competence and confidence (Barrows, 1985, Brown et al, 1987, Colwell and Smith, 1985) • Fear of making a mistake (Skillen et al, 2001) • Inadequate time to rehearse skills under the supervision of experts (O'Farrell et al, 2000) • Lack of role models (Voight, 1980) • Lack of support from clinical leaders and managers (Barrows, 1985) • Lack of peer support to corroborate findings (Skillen et al, 2001) • Workplace speciality (Barrows, 1985) • Lack of resources, lack of time and role ambiguity (Skillen et al, 2001). |
|---|

The extent to which these findings are evident in this context are an area of specific concern for this evaluation.

2.9 Summary points

- Physical assessment skills are an essential pre requisite for many new roles, particularly where the post explicitly provides substitution for medicine or involves prescribing.
- Anatomy and physiology has been the weakest component of pre registration curricular and although critical care courses have put in place remedial curricular content to redress this, the majority of nurses are under confident in their knowledge of pathophysiology and their physical assessment of patients. There is increasing pressure to enhance this aspect of practice knowledge for all health care workers, notably pre registration students.
- The distinction between advanced physical assessment skills and those used more widely, involves the use of auscultation, palpation, inspection, and percussion techniques. Outside America and Australia, these techniques are generally novel to practitioners undertaking physical assessment programmes.
- Physical assessment techniques need to be used regularly or they rapidly become redundant competencies.
- The issue of what should be taught, where and to whom remains contentious but there is concern that too narrow a range of skills limits the scope of the practitioner's assessment.

- Limits to financial and resource allocation to support educational provision can result in reduced length of courses and subsequently further limit content.
- Pressure to prepare the workforce in response to rapidly changing health care demand makes these programmes highly desirable and in some instances over subscribed.
- Work based learning strategies that ensure a nurse can consolidate the newly acquired skills into their practice under supervision is advocated with on going support and evaluation of their performance on a regular basis after they have completed the course. This is especially important where the nurses are working in highly autonomous, and or, independent roles.

3 The Acute Case

3.1 Introduction

The acute case study is based on data collected from two acute care trusts where the alumnae practised. They are identified as Site A and Site B. In site A, the majority undertook the physical assessment module (PAM) as part of the prescribing course. This was a compulsory element of this programme. The second group of practitioners were those providing out of hours services, notably hospitals at night and functioning as site managers. The lead managers for each service filtered applications prior to their submission to the SHA. Individuals were supported to undertake the programme if they could clearly identify the way in which their practice could be enhanced to improve patient care or the service they provided. In the main the arguments had to be presented to justify non-medical prescribing in their role.

The greatest number of individuals in this Trust who had completed the physical assessment module and prescribing course were Advanced Neonatal Practitioners. This was in response to an express service need to address a shortfall in medical cover. However, the majority had undertaken their programmes elsewhere and were not included in this study (although reference to some of the issues affecting their practice was made by participants). In the main, the participants in this evaluation were clinical nurse specialists, site managers, nurse consultants, night practitioners and their colleagues, managers and patients (stakeholders).

In the second acute trust (Site B), the concept of the new and autonomous roles for nurses had been embraced in the form of the A and E Nurse Practitioner and specialist nurses. Although the potential for nurses to use physical assessment skills, notably those in roles such as night nurse practitioners and those working in assessment units was recognised, there had been no strategic or multidisciplinary preparation to support comprehensive patient assessment by nurses in either delegated or autonomous roles. In spite of local enthusiasm from nurse managers, medical mentors and the alumnae themselves, the potential for enhanced patient assessment by nurses was not being realised. Extinguishing factors combined to inhibit the use of the physical assessment skills, and these were described by the participants as:

- lack of organisational preparation and multi disciplinary development of new roles;
- unchallenged traditional medical and nursing boundaries;
- pressures of existing workload; and
- the demands of service delivery targets.

As a result, staff were enthusiastically sent off to do the module, but students and alumnae on their return to practice had difficulty with rehearsing and consolidating their newly learnt skills. Consequently, assessment competencies acquired on the module were lost. Crucially all participants reiterated that to retain these skills they had to be used on a regular basis or they became extinct. However, alumnae from this site remained positive and felt that the learning from the module had enhanced their practice in terms of their understanding of the physical

assessment process but felt discouraged and sad that their new found skills were not put to use by their organisation as they had envisaged. Indeed the self reported difficulties by these alumnae were supported by observations of their practice, where none of their skills were put to use or where alumnae agreed only to be interviewed but not observed because of the factors listed above.

Contrary to this position, the specialist nurses within this Trust had been supported to acquire and use these skills by the Senior Medical Consultant who had a clear vision of how advanced knowledge and skills could enhance delegated roles of specialist nurses. For these alumnae, their physical assessment skills were put to use in their daily practice. However, these roles were subject to review and this created significant uncertainty and a reluctance to be observed.

3.2 The political context

The data were collected at a time of volatility. In the locality the SHA reported a £100 million overspend each year with a prediction this would increase (S&S NHS, 2006). This had resulted in a significant review and redesign of services provided in the locality. Public consultations on the proposed changes were underway at the time of writing the report. The proposals set before the public were making a stormy ride, with local communities of non party pressure groups and their local MPs formed to defend against any downgrading of services which included extensive petitioning, and local protest marches. Passions were raised at proposals to withdraw any level of services provided by the local hospitals. This created significant problems for the strategic planning of the Trust, because although they had the political steer from government and the modernising plans, this was subject to public consultation. Thus any major decisions to relocate or redefine services, notably where nurses in new roles might lead services, were held in abeyance until there was resolution. Notably the government took a back seat in these consultations with the local communities leaving Strategic Health Authorities and Chief Executives of Trusts to front the proposed changes. Thus the need for change was framed around changing demographics and spiralling health costs. However, the public construed this as deferring blame for financial mismanagement rather than political steer at these proposed changes. Central steer did come from briefing papers being issued to Chief Executives guiding them as to how to manage the sensitive message conveyed to the public (Nicholson 2007). However upbeat the message and use of positive spin to promote NHS successes, the public reacted in anger to the proposed changes. Increasingly, many of the proposed changes were labelled as 'privatisation by stealth' (Keep our NHS public campaign, 2007), which served to ignite further the politics of strategic planning.

At the time of data collection both Acute Trusts had 'turn around teams' in place with an express agenda to redress financial deficits. The Strategic Health Authority had recently experienced a turn around team and this had resulted in over 400 redundancies. At the point of transition, strategic decision making for the planning and commissioning of new services was a moot point, unless it could be

proven to be cost neutral. This had an impact on those who were trying to plan services within the Trust because no clear direction for future activity and commissioning could be identified (other than cost savings). One of the managers explained:

‘As a Trust we are not clear about where our future lies so we can’t plan which service to develop and which to decommission. We think we will be a critical care centre and that dictates the need for specialist skills. We also know the European Working Time Directive (EWTD) for junior Dr’s hours means that we will be looking at models of assessment with Out of Hours Services that are not necessarily medically driven. but anything to do with education and training has taken a back step because of where we are as an organisation. We are in the middle of turn around. We are trying to make really big cost savings and delivering services more efficiently. In the main that does not involve service expansion. It is a difficult time to be growing people unless it is cost neutral. Although turn around by default is modernising the service its so time consuming and very difficult for people to see what they are doing in one year’s time when you don’t know if your job is going to be here or even your service! This makes it hard to think: what if we had nurses doing Physical Assessment what would that look like?’ (Site A, Stakeholder/Manager, 2.4.07).

However the drivers to enable the development of new service roles (for those in post) and the factors that kept their role sustained within the turn around review were mainly policy driven and where the post specifically:

- met a National Service Framework for key services e.g. stroke services/ outreach/ cardiac care.
- had an impact on Trust targets e.g. a reduction in waiting times by fast tracking patient groups with care bundles/ pathways,
- provided substitution and delegation roles to meet European Working Time Directive
- covered for different ways of working for medical staff – which impacted upon nursing roles
- provided chronic care management: nurses taking up roles to continue to support patients and their families with chronic conditions.
- or
- improved patient services, if the initiative was cost neutral.

One manager described why they were behind nurses undertaking the physical assessment module because it enabled them to fulfil current service needs:

‘Patients’ want clinical efficiency and I am driven by the four hour target. Therefore, I am all for nurse led discharge and acute management. But we lack people who can operate at those levels and with those skills.. We have patient pathways where patients come into A/E and are allocated a bed on MASU. Nurses are best placed to assess the patients and

determine where they should go and into which care bundle if they have the right skills'.(Site A, Manager SH 44).

However, expansion and uptake to the physical assessment module running in 2007 remained static, despite Turn Around initiatives having reduced the time made available for people to attend education and training programmes and for study leave. Even if a programme did receive funding to backfill positions to cover study leave, the practitioners who undertook this module were invariably senior and specialist. This meant that even if money was made available, the practitioners' skills were not easy to replace and therefore the service could not be provided in their absence. This placed considerable burden on the nurses undertaking the module in their own time (or taking annual leave to attend the study days). Such an approach did impact upon morale and practitioner's willingness to step forward for further training.

'KSF and Agenda for Change ... and that whole comparative process makes people think: why should I do a course if it's not going to push up my banding? Well if you are not going to recognise my expanding role financially, why should I do it? There is a level of disquiet about along with what's in it for me? Or, why am I putting myself into a new position that is cut back down the line?' (Site A, SH 47).

Another manager picked this up and identified that this had a negative impact on people stepping forward to undertake the programme:

'People should be rewarded for their knowledge and skills but at the moment there is no incentive to do this' (Site A, Manager SH 44).

Therefore, the module was being run at a time when innovation and forward planning was inhibited by the lack of a clear, definite trajectory for service improvement. Although there were clear policy directives framed by the modernising agenda that generated plenty of ideas and potential, financial restraint was making strategic planners cautious about commitments to new projects and services. Practitioners were becoming less willing to commit themselves to new and potentially insecure roles. In general there was less time made available to practitioners to undertake courses and modules, even where these were programmes that had been prioritised by the Strategic Health Authority to meet a policy directive and to meet the demands of the local demographic need (See Tables 3.1 and 3.2).

3.2.1 The demographic need for new roles

The emergence of the new roles and new ways of working were responsive to the local changes in the demographic of the population and corresponding health care needs.

Table 3.1: Demographics Locality A Taken from Census 2001 b

	% people with limiting long term illness	% people of working age with a limiting long term condition	% people general health was good	% people health fair	% people with health fair
Locality	18.3	13.04	68.05	22.90	22.90
Region	5.47	10.63	71.50	21.38	9.2
England and Wales	18.23	13.56	68.55	22.23	22.23

Table 3.2: Age structure Locality A Taken from Census 2001 b

Population	% under 16	% 16-74	% 20-44	% Over 60	% Over 85
Locality	16.65	74.38	41.58	20.6	2.62
Region	19.93	72.07	34.62	21.17	2.19
England and Wales	20.16	72.22	35.15	20.87	1.95

In this locality 21% of the population were over 60 and this demonstrated a decline since 1991 when it was 25%. However the percentage of over 85s in the locality was over the national average. The largest consumers of the local NHS services, with UK statistics revealing that 2 out of 3 emergency admissions and 4 out of 5 GP or community nurse visits are made by those suffering from long-term conditions (S & S NHS, 2006). In the locality 18.3% self reported limiting long-term illness in 2001 (Census 2001 a) and this was well within the national average, although those self-reporting long term illness in the region was well below the national average.

This illustrates a mismatch between the strategic directive to drive forward the modernising agenda and the reality of practice whereby clinicians and Trust managers were fully engaged in addressing the immediate problems of provision in the context of cost reduction. The bureaucratic cultural juggernaut that makes up a hospital is slow to turn, but contrary to strategists assumptions, was further impeded by what clinicians described as juggling an ever growing list of competing demands to meet targets and change practice. Ergo, as more 'systems' were put in place to enhance efficiency and effectiveness, and thereby liberate practitioners to innovate, *ipso facto*, they increased paperwork and the management load that distracted clinicians away from the intended project to modernise and improve patient services. Consequently, despite the rhetoric, secondment onto education and or training programmes to facilitate new ways of working became a lower priority for clinicians relative to the other demands of their role.

3.3 The Physical Assessment Module: a model of responsive education

The physical assessment module is an exemplar of the responsive educational provision that was requested to meet a policy initiative. The Strategic Health Authority identified the need to run the module to address a number of governmental initiatives including: EWTD, new ways of working, and the introduction of modern matrons, chronic care management, hospitals at night, out of hours working, nurse led clinics, walk in services, and nurse prescribing.

They wanted nurse to provide services previously delivered by junior doctors. Key to the success of this was up-skilling nurses to undertake a full physical assessment. The initial request to provide this module was sent out in 2004, initially to provide a short physical assessment programme for District Nurses (prior to Community Matron role being fully operational). The first module, a competency based work based learning module as it is recognised today, was run in 2005. To facilitate the learning of the students, three work based learning facilitators were appointed to help consolidate the learning from the classroom into practice and also to provide support for assessment of competence.

The physical assessment module required considerable investment by the Universities; clinical laboratories had to be resourced with relevant equipment, the programme was personnel intensive and required visiting lecturers, often medical colleagues. After an initial over subscription for the programme, the number of applicants stabilised but the module places remained fully populated.

Responsive education has been established to enable Universities to provide packages of education to meet NHS need. Requests have a tendency to be immediate and short term. As agendas shift, so do educational / training priorities and commissioning patterns. The university is caught between the demand to provide these programmes and a lack of uptake by practitioners who are prepared (enabled or released) to undertake the course. The providers are under pressure to deliver the programme expediently, framed to suit the needs of practitioners and their managers, but also to ensure individuals could then practice their newly acquired skills as soon as possible. This has resulted in a curriculum that was conflated into the shortest possible delivery time but was to be supported by clinical supervisors, mentors and the work base learning facilitators. After one year, and as part of the reduction in the provision of indirect patient services, funding for the work base learning facilitators was withdrawn. At the same time, funding to support continuing professional education was reduced, impacting on both the University and Trust.

A recent Health Select Committee into Workforce Planning (Report, 22nd March 2007) noted a 'disastrous failure of workforce planning' with too few people with the ability and skills' and an 'appalling co-ordination between workforce and financial planning'. A recent reduction in the education and training budget to offset deficits in the local health economies⁸ has meant that support for post registration study was particularly badly affected (Whittington, 2007a). This directly affected the physical assessment module through

⁸ Described by the Secretary of State 'as very large cuts in education' (Whittington, 2007).

- loss of work base learning facilitators in March 2007;
- a reduction in study leave and funding leading to more self funding students studying in their own time; and
- fewer mentors to facilitate learning and assessment in practice.

Therefore, even though this module is one key element of workforce development to meet the modernising agenda⁹, and might have been considered a priority, it demonstrated no greater capacity to resist cuts than other courses. A key question for this evaluation is was this because the module failed to deliver all that it promised or simply a collateral casualty of the post registration education and training cuts?

First, this case explores the impact the module had on the practitioners in acute care practice and facilitated new ways of working. It then explores how the colleagues of the practitioners and importantly their patients, received this. It looks at what worked well on the module and how those elements could be enhanced. It then reviews the organisational barriers in the acute care setting that inhibit the practitioners from realising all the outcomes of the module and the ways in which some individuals managed to overcome these. Finally, it turns to review the way in which the physical assessment module could be rolled out to other groups of staff to ensure greater capacity to respond to patient need. In many instances, when practitioners describe the impact of the physical assessment module on their practice, they also make reference to their new roles and how this has impacted on the service they provide, and or, on their colleagues. This illustrates the extent to which physical assessment skills were integrated into their professional repertoire and range of clinical activities.

3.4 The impact of the module on practice.

The majority of practitioners at Site A were specialist nurses who then undertook the Physical Assessment Module to supplement their skills or to formalise their use by a recognised qualification (or to go onto prescribe). This significantly affected the way in which they constructed the impact of the course as either consolidation of existing learning and practice, or the acquisition of new skills. Although many initially described consolidating existing knowledge, in fact revisiting information at greater depth associated with learning new techniques of assessment, fundamentally altered the way they thought about physical assessment findings and the actions they took as a consequence.

I'm not sure if I learnt something new [apart from tools and techniques for percussion]. But it allowed me to really reflect on my practice and the model I then use for physical assessment. I am much more questioning of

⁹ The 2007/8 Service level agreement and accountability framework is set to underpin education and training allocations for the SHAs. They will be held to account for the training they arrange for students and the workforce to meet the needs of patients. Facilitating new ways of working is given priority. Despite this, 7 SHAs have announced further cuts to their commissions. Cuts to Trusts support for CPD release will continue. This has had a significant impact upon Community Nursing Courses (Whittington, 2007b). As Community Matrons are a key target to undertake the physical assessment module, the current recruitment crisis to the module is thought to continue.

what I am hearing, thinking more about the past medical history and trying to make sense of what that could be. It has also given me the courage to think something is abnormal and to discuss this with the Consultant (Site A, NP 41, 23/4/07¹⁰).

'I hadn't got any formal qualifications in physical assessment, although I think as a critical care nurse, you do undertake a lot of that. But I don't think I was ever formally taught, and certainly formally taught respiratory assessment on self-ventilating patients' (Site A, Stakeholder, 42.)

'I have done lots of specialist courses in the past and they have all involved some form of physical assessment, but not to the depth of the PAM so it was about consolidating my knowledge but also learning it to a much greater depth and being able to make differential diagnoses, to be more reasoning and to think a bit more laterally when pulling everything together' (Site A, NP 46).

The systematic approach to the assessment process, the depth of learning and underpinning theory enabled the nurses to reflect on their practice knowledge and enhance their clinical decision making skills. This then enabled them to apply new skills to increase the scope of their assessment.

'I now assess for fluid levels in the abdomen – I didn't know you tested for shifting dullness by rolling the patient from side to side and percussing different areas. I have used that a lot when patients come in with big ascitic abdomens. But the biggest thing I learnt was how to diagnose' (Site A, NP 46).

For this ex-student, now mentor, it enabled her to apply her learning in a new context and with a different client group:

I think I learnt more about physiology and anatomy.... In critical care, you're learning to listen to a patient that's already ventilated. So there was quite a lot of practice focusing on what was abnormal. [On the course], we practiced on one another getting to listen to what normal breath sounds and heart sounds were like. I think it was the detail of the assessment I hadn't done before. Previously I would make a visual assessment of the patient and would undertake auscultation, but I was learning things like palpation and percussing, listening to different heart sounds. I had assisted doctors doing that lots of times, but had never formally done that myself.It made me more confident particularly with respiratory assessments. As an outreach nurse, I get called to see patients who are breathless, who have poor oxygenation ... it helped me to really think about what's going on and what is the cause of that ... for example, is it a secretion thing or is it an overload thing? (Site A, SH42).

¹⁰ This practitioner had undertaken a specialist clinical masters programme related to her field of critical care practice.

A summary of the way in which alumnae and mentors reported the course had impacted upon the participants practice included:

- Understanding how medical colleagues take clinical histories and record them.
- Writing with confidence in the medical notes
- Systematic assessment and framework to formulate a differential diagnosis.
- Built confidence to acquire further advanced diagnostic skills (e.g, reading a CT scan)
- A broader assessment notably when attending rapidly deteriorating patients in other specialist environments within the Trust, can pick up on things that have been overlooked
- Greater confidence to refer new patient problems to Consultants: using the right language to get attention for the patient.
- Making documentation succinct, feeling confident to write effectively in medical notes and write referral letters
- Being able to teach systematic assessment to colleagues.
- Application of PAM learning to other models of assessment e.g. ALERT, but providing greater depth and detail in the assessment process.
- More proficient in assessment with an ability to assess, reflect, diagnose, pursue further information and correlate this to an action plan.
- Enables them to do their job more effectively.

The novelty seemed to reside in the way the students were taught to use their senses and correlate their findings to formulate diagnoses as much as in following a systematic method by which the assessment was to be conducted. This so inspired this alumna that she chose to share her new skills with her colleagues.

‘One of my real new pieces of learning is looking, seeing and feeling what are those [breath sounds] what do they mean? What are those sounds that I am hearing in these different zones? What are their implications? How can this help me to prevent a patient from being ventilated? How can this help me to progress a patient and recognise when I have pushed them too far, too fast with their weaning I have also learned to listen to heart sounds. This has been difficult in the past as they are hard to hear with a ventilator crackling away in the background. But I am now attending to this and ensuring I am teaching this to the other [ITU/HDU] staff’ (Site A, NP 45).

This was felt to be important because the medical staff had recently introduced a new system for conducting the ward round known as the ‘virtual ward round’. This was achieved downloading the patient’s physiological and technical recordings from a computer at the bedside and displayed on a screen in a teaching room. This enabled teaching for medical students and doctors in training. The virtual round is attended by a multi disciplinary team and is followed by a visit to each patient for a review of charts, medications and to gain feedback from the nurses

at the bedside. The nurses dislike this approach because many changes to patient treatments are made remotely and they have less time to discuss any concerns they have about the patient with the team. This initiative was considered to be a significant driver to ensuring the ITU nurses could undertake physical assessment and alert the medical staff to any changes in the brief episode of interaction they had following the virtual ward round. An alumna explained:

‘The Doctors do a virtual ward round in the morning. The doctors spend less time at the bedside. [The PAM] made me very aware of when they’re not properly assessing the patient, and that, if they’re not doing it properly, I need to do it properly, or to do it to the best of my ability. By the time they get to the bedside, if I know I’ve got just a few minutes with them, I can say to them, ‘I’m not hearing anything at the bases; I’m beginning to wonder whether that’s a pleural effusion building up there’. ...Before the PAM I would have recognized a wheeze but now I am able to differentiate different breath sounds and understand what they mean. Now I can start guiding the doctors to focus in on a problem for the time they are at the bedside’ (Site A, NP45).

However, at Site B there was less enthusiasm for the activity because the alumnae could not identify a clear correlation with clinical outcome or further investigation.

‘I don’t use them [physical assessment skills] as I don’t diagnose. So it’s just one more examination for the patient, poking them around, and I don’t see that I have anything to add to that. I can’t ask for a scan or an x-ray and I can’t prescribe anything and the doctor wants, quite rightly, to do the examination themselves. What is the point if I have to get the doctor to sign everything? If we could prescribe, order scans and do blood gases then it would make more sense. Examination alone is not enough (Site B, Alumnae).

However, at this site the issue of time and workload also had an impact on the wider use of the skills:

‘You are frequently managing on minimal numbers...unfortunately at the moment the way we nurse does not support the band 5 nurses using them (physical assessment skills).....At the moment they do not have time for that, they do not have the luxury of spending that time with the patient. If they (the patient) are poorly they get Outreach or the doctor and have to hand that over. It is sad but it is a fact of life’ (Site B, Clinical Matron)

The next section explores the contextual factors that enable or disable the use of the skills learnt on the module.

3.5 Barriers and Levers to the use of skills in practice

3.5.1 The medical response

The roles that the nurses were undertaking were to a greater or lesser degree substitution or delegated roles from medical staff. In nurse led clinics where the nurses were able to use their physical assessment skills they were able to provide continuing care for the patients. This seemed to be unproblematic when the nurse was known to the consultant over a prolonged period of time and boundaries and points of referral had been negotiated prior to them undertaking the module.

‘The consultant’s I work with are very supportive and they know I will refer anything back to them that I am concerned about ‘ (Site A, NP 41).

‘I had been a senior sister in the speciality for a few years prior to undertaking this role. The [Consultants] all knew me and that clearly had an influence. I will always seek advice if I am not sure what I’m hearing or seeing, and that reassures them. The registrars take a little while to warm to us. The consultants always introduce us as: ‘the people who will teach them about how to manage [condition]!’. But we do respect them [the SpRs] and we aren’t going to go steaming in there and tell them what to do. We will offer advice and say: would you consider this? We’ll offer our expertise, but never take over. We change nursing care management but prescriptions are down to them. We are respectful that, at the end of the day, the patients are under the consultants’ (Site A NP 46).

This resulted in a clear transfer of patients into the care of the nurse specialists:

‘They will refer patients who require either some level of education and support around their condition or titration of medication or close monitoring to keep them out of hospital and monitoring therapy against symptoms. They will have instigated some sort of management plan and then want our input to carry that forward’ (Site A NP 41).

Conversely, relations with medical colleagues could be problematic when the nurse was unknown and or working in a different clinical context.

‘It [physical assessment] is not a role that is recognised by the medics. We might carry out the examination of the chest, heart or abdomen but they would go on and do their own assessment to cover their clinical accountability’ (Site B, Alumna).

In response to this issue a medical mentor (unusually sympathetic in this site towards nurses undertaking physical assessment) stated:

‘You need to work as a team not “I am the doctor so I do this and you are the nurse so you do this. We do it combined. We both listen to the chest and then talk about the findings’ (Site B, Medical Mentor)

A ward manager described a more generalised resistance to such an approach:

'I was hoping the girls would use their skills and I would like to persuade the consultants to let them do itIt's like pulling teeth. It's having to persuade the doctors, particularly the old school, that it's the way forward. It would make life easier and it makes perfect sense for them to do it as I think that nurses are more thorough (Site B, Ward Manager).

In Site A one nurse consultant described how she had managed the initial resistance to being challenged in her Outreach role

'I've some negative experiences and it's always been around misunderstanding about the role ...in the early days of the service. I rang the surgeon around a management plan, about decisions that had not been made, and I was concerned about the patient, and the response was: "Well what are you doing there anyway?" I turned it around to say I was part of the multi-professional team and that I felt that I had got something to contribute and that I'd been called to see the patient because the ward staff were concerned about the patient, and couldn't get any of the team to actually address the issues. I have to say afterwards, he was as nice as pie to me and even introduced me at some meetings saying how valuable the role was. The second time it was with a consultant, who was far more aggressive he was actually in the ward having a go at me: 'what was I doing there?'. I withdrew and made an appointment to go and see him and actually had it out in private. ...Then it was quickly resolved. In both incidents it was with people whom I hadn't had a great deal of interaction. ...Certainly with the registrars, the difficulty is that we can get referrals from a number of different avenues, including the site managers and the ward staff, that if we arrive and the parent team arrive at the same time, they're like, "Well what are you doing here?" I try to emphasise that we're there to support the nursing staff. We are not there to prescribe or to take over care, but to support the nursing of the patient. When they see you in action, they can see what you're trying to do they then realise that you're not actually trying to take over their job, you're actually there for a different reason and it's fine¹¹. (Site A, Stakeholder 42).

However, this approach might well reflect the individual's own personal qualities which in combination with her autonomous role and professional maturity, gave her the confidence to assert her position. Alumnae in less senior positions and in more generic posts might be dissuaded from so doing because of their perceived legitimate authority to challenge the status quo. However, once the competence

¹¹ As part of the outreach assessment, the nurse undertook a physical assessment of the patient alongside a medical history review to inform her interventions including immediate provision of emergency care before conjointly determining a treatment plan, or referral into an appropriate care pathway (which may include admission to ICU/HDU), with appropriate medical staff. As has been previously described the impact of the physical assessment skills learnt on the module, informed the way in which she undertook her assessment, made differential diagnoses and or communicated her findings in appropriate terminology to the medical staff. This process of itself, alongside the accuracy and skill demonstrated by the Outreach Nurse Consultant, won over the medical staff to recognise her contribution to the team management of deterioration in the acutely ill patient.

of the nurse to assume physical assessment in a delegated role is asserted, this still had to be managed; notably in ensuring there was no duplication of effort.

'We are trying to streamline [the service]. We lead on the early follow up post hospital admission they usually go through the nurse led clinic whilst they go back to the cardiology clinic when we have done as much as we can because otherwise we were duplicating. But if the patient requests to see their consultant we discuss that with them and if it's a question we can address then we do that and if they still want to see the Consultant then we obviously would facilitate that for them. We don't give them choice as such but respond to their individual needs. (Site A, NP 41)

However, whilst observing the nurses at work in their clinics something distinct about the client group with whom they met was noted. The reflective note from the field diary summarises this impression:

I have the distinct impression from sitting in on their clinic and chatting to the patients that the CNS's are fielding certain patients for the Consultants and medical staff: those full of conversation, who are depressed, needy, distressed and or anxious. The CNS takes time to answer their queries, listen to their stories, to hear of their lives and their distress. But for some of these patients, bar manipulating the drug therapy regimes in response to the blood results and other physical assessment findings, this is what they need. Someone to take them seriously, respect their anguish and be there for them to offer advice, education, support and care. I am struck by their compassion, infinite patience, yet skill to get the patient back to the point to address their health priorities and then give the rest of the time over to hear what they, the patient or relative, feels is in need of being told. A manager suggested that this was perhaps an expensive service for such a need, but I am left to doubt if a value could be ascribed to such empathic and therapeutic interventions. These actions, delivered by these Clinical Nurse Specialists, in this service, not only keeps the patient from using the emergency and GP services, they free up the consultants to deal with the more acute cases. The significant problem is in evaluating if this care is cost neutral given the funding for this service may be being recouped in another part of the NHS (Reflective Notes, Field Work).

The nurse manager described how difficult it was to account for this type of patient service when it could not be costed or the outcomes clearly delineated:

'Patient's and families love the nurse led clinics because of the attention, but we have to ask: is this value for money? Is this the best use of time? Most nurse led clinics have no financial flow from the PCT. Besides, the prescribing budget was withdrawn from Outpatients as a cost saving instigated by the turn around team. Therefore, for all those people we have put through the course to equip them for non medical prescribing, the pay back for that activity has been pulled at a stroke. It goes back to the fact we have no clear plan within which to strategically manage the service and

plan for the next five years. We can make plans and then find they have been cut to meet financial restraints and worse, as a cost saving to the Trust, a service is lost. (Site A, Stakeholder Manager).

This has left many of the nurses with the imperative to keep accurate audit data on the outcomes they achieve. This practitioner had learnt to keep data on her service. This had not come from the physical assessment module, but rather from her clinical masters degree. This quote demonstrates the integration of her learning from the masters, her application of physical assessment to her nurse led clinics and application of advancing patient group directives to achieve better patient outcomes.

‘We have had a down trend on readmission rates they are fairly low numbers but it is important as that was one of the reasons for setting the service up. We have very good patient satisfaction data and in terms of medication we are very happy that we are giving the appropriate drugs to the appropriate patient that we are not missing out certain groups of patients. We have just had our annual audit and one area where we felt we were not as potentially aggressive as we could be was around Beta blocker use prior to patients being discharged home from hospital. One of the criteria for not using a beta blocker is that it might be too soon after an acute exacerbation. We felt we were putting people into that group before a conscious decision around beta blocker use had been made. We discussed that with our consultants on Friday and we have a clear plan of action to challenge our practice and be sure we are not sitting complacently. (Site A, Alumna).

These data indicate that the successful use of the physical assessment skills learnt on the module increases the practitioner’s confidence to consider widening their scope of practice still further. However, when these skills are used for the purpose of the organisation (rather than personal development of the individual nurse) this does rely in part, on the acquiescence of the medical staff. The personal qualities and credibility of the practitioner do much to secure such agreement but this has to be continually negotiated and managed to be successfully maintained. This indicates that post holders who provide the new service of physical assessment in the Trusts have to be highly skilled professionals as well as accomplished individuals, particularly when attempting to change entrenched attitude amongst potentially resistive colleagues. This indicates that highly competent use of physical assessment skills, although essential, in isolation are insufficient to ensure their use in practice. This also casts some doubt on the speed at which the nurses are assumed to acquire these skills on the module, because assured confident practice comes with adequate rehearsal and support. Further, without that, or where low self confidence and professional esteem persist, any skill acquired on the module might well be lost to the organisation resulting in an outcome of personal development rather than inspiring professional change that leads to ongoing service developments.

3.5.2 Infrastructure and organisational issues

Although the personal requisites of the individual practitioner are paramount, the organisation does have a part to play in facilitating the success of the application of the skills. First, in creating legitimate roles for practitioners to practise these skills, secondly, in strategic planning and roll out of the way in which new roles can be embedded within the organisation, and finally, in promoting and supporting the roles. To achieve these outcomes inter-professional development that explores and then seeks to overcome potential barriers and resistance is an essential component of any activity. Without this, as was the Case in Site B, individuals, however charismatic and determined, had little chance to change attitude and embed their skills into their every day practice, especially where the more immediate concern of cost containment was top of the agenda. At Site B, the concern was over the use of the skills to facilitate the Hospitals at Night programme.

‘I wasn’t sure how roles might be developed so it was a bit of a trial to see where it [the physical assessment skills] might fit into practice. We did not have a robust system of support for those skills. We had not approached the medical director. We had not thought through who would act as mentors. So it has been lots of trial and error and having [alumnae who have] completed the module we haven’t moved on and said this is the way we want nursing to go. I don’t think that it is lack of willingness and enthusiasm more that the Trust has been operating with financial pressures being the driver so there has been no development in terms of new roles. (Site B, Clinical Matron).

‘People have extra knowledge and great ideas but are not using it because the infrastructures are not there’ (Site B, Trust Development Nurse).

‘At the minute it [physical assessment module] is not recognised within the hospital as a course that enables us as nurses to assess a patient in that extended role. Hospitals at night has not yet been fully implemented so we [Night Nurse Practitioners] are not fulfilling the role’ (Site B, Alumna).

Another barrier described by alumnae in Site B was the lack of policy to legitimate their activity. A policy was perceived to be an additional safeguard to protect the practitioner when they undertook an extended role.

‘We do not do blood gases ... you have to have a policy to say you can do that. There is still a traditional view of what nurses do and to go outside that sphere you need a specialist role that is recognised. It comes from above, it comes from the Trust who has a policy in place to make sure you can use those skills, especially when you are going into the medical role’ (Site B, Alumnae).

Policies are useful levers to the implementation of new or expanded roles (Levenson and Vaughan, 1999), especially when they are operationalised in the form of a protocol. Because they are normally generated by a multi disciplinary

team and the values clarification of role activity has been discussed prior to, and during, the generation of the protocol, they achieve some form of consensus. However, their development can be lengthy, delayed by the necessary process of negotiation and agreement of what constitutes the policy, and by whom and under what conditions the protocol can be implemented. However, even when a protocol has been developed their wider use by the professional population can be problematic especially if a level of disagreement over the appropriateness of the policy persists (Cabanna et al, 1999). However, the data from this evaluation indicated that when targeted to a particular group of staff who had undertaken specific training, a protocol can act as a significant lever to ensure new skills are put into practice but only when combined with other organisational initiatives to support and promote the new ways of working. The complexity of implementing a policy for nurse prescribing in site A illuminated many of these issues.

3.5.3 Nurse Prescribing: implementing a new way of working

In Site A, the Trust was committed to the wider roll out of nurse prescribing. At this site, the initiative was led by a senior member of the nursing team, and driven by a steering group that included a range of senior multi disciplinary stakeholders. The passage of the innovation and wider acceptance of nurses undertaking the role had gone through a stormy passage. Resistance from medical directors was one of the significant blockers, notably their concern that nurses did not have the necessary knowledge and training to prescribe medication. To address this concern, the physical assessment module was cited as a pre requisite to undertaking the full nurse prescribing course. However, despite these moves, the majority of nurse specialists favoured the use of patient group directives [PGDs] over and above prescribing:

‘We have had a lot of discussion around nurse prescribing and actually the view taken by [this] team is that we shall use PGDs [patient group directives]. That works well because the protocol allows quite a lot of remit but helps us to make clear decisions and I think from a medical perspective they have the confidence that we are working within that. It is interesting that our cardiology colleagues are slightly anxious about nurse prescribing in general but are quite happy with other areas of expanding practice. The PGD allow us to do what we feel comfortable with and use our assessment findings and where things fall outside of that we would want to discuss that with a medical colleague anyway and value that interaction and discussion’ (Site A, Alumna 41).

There was still quite a conservative resistance to greater uptake in nurse prescribing by some senior and influential members of the medical staff. In general, patient group directives were favoured. This gave the practitioners more scope to manipulate therapies within their sphere of practice, but also enabled more nurses to make the changes rather than those who had done the full prescribing course. Once again, circumstantial limitations were cited as factors inhibiting the uptake on the full prescribing programme.

We use PGDs and they are fairly limited. I prefer this route rather than prescribing as this means all the team can use them rather than just me as a prescriber. We are working to add stat I/V fluids to the list, but there are issues that still need to be overcome. I have not undertaken the prescriber course as it amounts to seven weeks of time and I cannot justify that amount of time away from practice at the moment' (Site A, SH 42).

'We have patient group directives and within the sphere of core drugs used to treat heart failure [ace inhibitors, diuretics, beta blockers] we are able to manipulate therapy [based on reviewing blood chemistry results and physical assessment of the patient]. I wouldn't take the prescribing course because with the current financial climate, I couldn't get the time or funding to go off and do the course' (Site A, Alumna 46).

Here the nurses demonstrated a commitment to protocol use, but explicitly in the context of formulating diagnostic criteria informed by blood chemistry results and the capacity to exercise their professional discretion: when in doubt they would refer matters back to their medical colleagues (with whom they had open lines of communication). But, these nurse specialists were working with a highly specific group of patients and had, over years of experience and studying, built a portfolio of knowledge and skill in that subject area (one programme being the physical assessment module). Therefore for them, a protocol was a tool to enhance, and through expansion of the PGD, expand their practice further. However, this is not always the case with some practitioners finding protocols inhibiting rather than liberating especially when they were over cautiously penned and designed to be restrictive (Scholes, Vaughan and Furlong, 2002).

An additional concern for protocol use is that they can reduce practice to seemingly simplistic and elemental conditions in which action can be taken. This can then belie the complexity of the clinical decisions, and the knowledge and experience that informs clinical decisions to be made within the protocol. This can lead to an inflated assumption about who can use the protocol and drive delegated and substitution roles to less experienced personnel. This has been evidenced in the desire by some managers that the roll out of physical assessment skills should be devolved to Band 5 practitioners (Site B, Clinical Matron) where they have not necessarily had the advantage of post qualification programmes to enhance their knowledge and on which to build physical assessment techniques. This issue is expanded in section 3.9.

3.5.4 Summary point

At the time of data collection both in site A and B, where wide scale agendas for innovation to changing service provision (Hospitals at Night and Nurse Prescribing as examples), were being facilitated by the use of up-skilling nurses to undertake physical assessment through the module, contextual factors were identified as inhibiting organisational implementation. In Site A, Hospitals at Night had been implemented and the night nurse practitioners were using the physical assessment skills but nurse prescribing was slower in achieving roll out. The nurses who had undertaken the module were using their physical assessment

skills, particularly where they had an autonomous role e.g. nurse led clinics, night nurse practitioners and in the outreach service. However, the range of skills they used varied according to their sphere of practice. In Site B, nurses in autonomous roles (i.e. working in nurse led clinics or on CCOTs) were more likely to be using their skills, but the culture in the Trust was less fertile in which to enable others to practice their skills. Of note, priorities of workload, staffing and meeting targets diverted the Night Nurse Practitioners from using their skills. Skill fade meant that many felt under confident to use their physical assessment techniques as time passed from completing the module and their opportunity to apply the skills in their everyday practice.

3.6 Physical assessment skills in use

The module was written to address all the major systems of assessment that could be required for community practice as well as acute care practice. The students were required to be assessed in three elected topic areas¹². The majority working in the acute care settings elected for respiratory, cardio vascular and abdominal assessment. Neurological assessment was taken up by those working in the specialist area, but the extent to which the range of skills were put to use was dependent on where the nurse worked. There were some areas that the clinical nurse specialists found less useful in the acute care setting.

‘If I thought something was wrong with someone’s eye I really would refer that on straight away. The neuro assessment, which is not part of my everyday work, certainly was useful for my clinical work on the ward. So I might not be working at the level we were taught for that specific bit but I could take something back into practice. The abdominal side of things I did think was very useful - although I would not formally assess someone’s abdomen. When you are caring for patients and they are complaining of something you can draw on your knowledge to recognise if it is normal or abnormal but you may not be working at the level you have been taught because you are not doing it day in day out – but it is taking it to a better level of understanding. (Site A, NP 41).

‘The bones one for me was not so relevant - it that was hard going! But having said that people come in [to clinic] with stiff knees and you try to put them through a range of movements, so it has been useful. Although my patients are coming for a very focussed assessment from my perspective they actually say: ‘and of course I’ve got this pain in my knee and this rash come up on my arm or this thing come up in my eye ... you’ve got to give some advice even if it is ‘best go and see your GP!’.
Invariably unless it is something incredibly obvious like a stye or a rash that

¹² At the other University, the level 3 and M level students’ OSCEs could be on any of the body systems covered in the courses (at level 3 they’re expected to undertake three separate systematic physical assessments, whereas at M level they need to prepare for examination of all body systems - they have a long case format where they have to demonstrate consultation, history taking skills and decide which body system/s needed to be examined so that they can develop their differential diagnosis and ongoing treatment/management plan

has come up 6 hours after penicillin or another incredibly obvious reason why it is happening, we ask them to go and see their GP' (Site A NP 46).

'I only use the neuro and respiratory assessments. I did the GI one for my course but I haven't used those skills in my everyday practice. You have to consolidate the skills to keep them current' (Site B Alumna).

'I do use the neurological assessment to a lesser degree, but that is the further system that I apply the most to my practice. The others systems I enjoyed doing and learnt a lot and it was very interesting but I have not undertaken an eye assessment. We have only had one ophthalmic review in the last year and all the junior doctors were up here taking a look! I do not think that I would have enough practise to be able to look into someone's eye and say they have a problem. But in retrospect, I wish they had said: we will assess you on three out of four systems and that would have made me learn the neurological assessment back to front and inside out, rather than just picking at it. Then I would have a got even more out of the course' (Site A NP 45).

In contrast to this the night practitioners felt they wanted to know all the systems, because they could get called into any situation and be asked to respond.

'The surgical night practitioner may look at the abdomen and chest – but may at some point be called across to help with an eye exam. The medical site manager will swap – so they needed a really broad spectrum of skills and they felt the course provided that so it was very positive. Some were disappointed they were not able to access the gynaecological assessment. We have a large gynae service and medical cover is via 'on call from home'. So there is no quick access to a gynae SHO – so they said that would have been nice to complete whole systems review' (Site A, SH 48).

The requirement to rehearse the skills and keep them fresh was cited by all the participants as crucial. The night practitioners who were called upon to use the whole range of skills were the ones who most strongly requested the need for a regular review day to update and review skills that were not so frequently used.

'It is a physical skill and there is something about the experience – the more you see of things the better you are at recognising normal and abnormal and the subtle variation and also because it is a skill there is that refinement with the dexterity that goes with it and the confidence you have with that. I feel the value is repeatedly doing it with similar sorts of patients so you are picking up the finer aspects' (Site A, NP 41)

'You rapidly loose the skills of using the instruments and being able to define the subtle differences in the findings. It was really good to do [all the systems], but I felt you needed a core pathway that everyone did and then specialist pathways that people could follow that suited their needs either in acute care or general practise' (Site A, SH 42).

This then begs the question of the module's value and to whom. The alumnae were clear that it was for someone who:

'...is working autonomously. Someone who needs to make some sort of assessment as part of their clinical work. The question in economic difficulties is who should be supported to undertake these different levels of expanded role? This is where we should be really careful that the right people are going on these modules. They are not easy skills and if it is not integral to your day to day work – you can tick the box and then not use it! If you were a ward based nurse I think you could get quite a lot out of it but I do not know how much you would use them because when you are assessing a patient on the ward you are not assessing at that same level unless you have some built in time to do that. Unless you are assessing or practising the skill it goes (Site A, NP 41).

3.7 Physical assessment: medicalisation of the nursing role?

The major criticism of the physical assessment modules is that it is purely delegation substitution roles and that in emphasising this component of practice, it somehow diverts attention away from other critical components of nursing care.

'The physical assessment module can be perceived as a course for people to support medical staff, rather than nurses to take forward nursing practice in a more holistic way. It is very biophysical by the very nature of the beast. Some take it back and apply into their nursing practice, but I am not sure we can say that is true for everyone who has done the course. Some more closely identify with the medical model and the medical way of doing things. The risk is that in focussing on one form of assessment we are inadvertently giving priority to that over other forms of assessment (Site A, SH 47).

One member of a CCOT started to feel alarm at the way in which she was increasingly being used instead of her medical colleagues:

'I felt that the course was not relevant to my job. As an emergency response nurse, and the type of patients we get called to see, it is not appropriate to do the full assessment. The ALERT system which is a short sharp assessment is far more suitable. I imagine for out of hours work then it is more suitable, but it started ringing alarm bells in my head and I started thinking are we being pushed into being substitute doctors? ... We get a lot of vague referrals and people asking us for medical advice, not actually anything to do with critical care nursing which is our speciality (Site A, SH 53).

This was the only respondent at this site who questioned the relevance of this module to her job. A second alumnae did suggest that more learning had taken place in her clinical setting and from her Consultant, than from the module but she was working in a highly specialist area and did not apply other systems of

assessment to her practice (she undertook the course for prescribing purposes). However, the remaining participants did talk about how they had integrated their learning into their roles, and how they added this to their repertoire of clinical nursing skills. These practitioners were very senior and experienced nurses and for them, the integration of the physical assessment into their repertoire of nursing skills was a natural progression and development.

‘When I go to MASU to arrange for a transfer to the specialist unit I can emphasise the importance of gaining a specialist bed, ordering specific mattresses, if needed. I can advise on their mobility support needs and if they have a catheter various care requirements. I can make swallow, speech and language assessment and make recommendations about keeping them nil by mouth or to encourage drinking and eating’ (Site A, NP 43).

‘I lattice all this [physical assessment] into my [ITU] nursing care. The best time to assess a calf is when you are washing the patient. The best time to listen to the bases of the lungs is when the patient is turned. You are learning a whole new area and this is separate at first but you soon learn to amalgamate this into what you do’ (A, NP 45)

‘I don’t think that it has to be a nurse to do this but it depends on the context the technician is going to be working in. It’s the different background knowledge that a nurses has ...you can train anyone to take a blood pressure, or take a pulse, but unless you have got substance, some background information or knowledge on which to then say: is that pressure normal for the patient? What has recently happened? Have they had any drugs or surgery? Been through a procedure? Has someone just told them their mother has died? You know it’s the wider things that affect what you find’ (Site A, NP 46)

In site B one of the alumnae described how she saw the practice of physical assessment as something other than nursing

‘A doctor told me to go and examine a patient he said: go and have a look he’s got a really good enlarged liver”. So I went in and this guy was uncomfortable, he was in pain and he already had every Tom Dick and Harry prod and probe him. I explained who I was and asked if I could examine him and he said: “yes!” But I looked into his face and said: “You don’t really want me to do this do you? And he said: “no!” I have just had everyone in here poking me and I know what it is. No one has spoken to me but I think it is cancer” and I ended up talking to him. My role changed. When I came out the doctor said: Did you feel it?” and when I said no he said: “you should just have done it!” ... I think the medical staff can just do that. I was astute to what the patient felt and I couldn’t just see the patient as a body for me to practise on. Maybe it’s my nursing background, but this was a human being with worries and feelings but medics are different. For them it’s just the appendix in bed 1 or whatever. (Site B, Alumnae).

It seemed that practitioners who had a high value in their identity as a nurse and valued their nursing knowledge could more effectively incorporate physical assessment techniques into their caring repertoire. However, those with a less clearly defined self or professional concept or those who felt other social or cultural pressures saw this as limiting their actions as a nurse.

3.8 Learning physical assessment skills

The factor that all the participants commented upon was the experience of undertaking the most clinically oriented and practical module they had previously experienced. The pace at which this was taught and acquisition of new technical skills as well as theoretical input to underpin the activity, was viewed as both exhilarating and challenging.

‘Best bit of the course were the theoretical input and the practical demonstrations. The knowledge shared within the group with people who have different expertise. The OSCEs; my mentor; practising on each other and then the patients. I am a practical person so I found those elements more useful than the assignment’ (Site A, alumna).

‘It was very challenging, it was all so very interesting. With neurological assessment it can take Drs months to be able to do a neurological examination competently and understand. But we had this taught in a morning all very slickly done, you know, the cranial nerves in an hour! I felt that with several of the lecturers, they were brilliant, their knowledge could not be faulted but their actual skill in teaching that knowledge was something else. ... Half way through I just stopped writing. I thought I can’t do this! I couldn’t take it all in. Many of the others in the class said they felt the same (Site A, alumna)

Working with the mentor at a pace that suited the learner, was found to be crucial¹³. Here working with the mentors in clinical practice was identified as the most satisfactory way in which to develop skills and techniques of physical assessment.

‘The registrar taught me top to toe assessment. The consultant taught me what to pick out. I went with him into his clinics and watched him, then he let me assess and he asked me questions. I learnt what I needed to know from him. He told me that many GPs and Consultants do not have skills at this level for neurological assessment. The course taught me some useful aspects about assessment for elderly patients, but on the whole, a lot was not needed for my role and highly specialist aspects of assessment I undertake in the clinic. I did the course for prescribing. I would say that I use very little of the PAM back in my practice when I run the nurse led clinics’ (Site A alumna, 54).

¹³ None of the participants interviewed at this site had worked with the Practice Facilitators in the clinical setting.

'At first we worked through theoretical stuff, differential diagnoses, then we would identify a patient and go through the assessment with her watching me and asking questions about what I was doing and what I found. These would be patients I was going to assess anyway because of my job, but there were a couple of times when I picked up a few inpatients from the X ward and asked their permission to undertake an assessment with them. None of the patients minded they said they were really very interested and found it quite an education for them. It generated a lot of questions from the patients, which was good!' (Site A NP 46).

'My mentor said to me: go away and practice on your husband – just keep practising, there is so much to it. You just have to keep practising and then it will come. That slickness, the artistry in the assessment, it comes with years of practise and she said that most GPs don't have that level of skill (Site A, SH 43)

'We were almost like performing monkeys, really, we kept practising on each other and you know, got it off to a fine art and anyone watching us would've thought, "Gosh, you know, they're really good". But we weren't really taking those skills out and listening to sick patients and someone saying, [particularly a medical supervisor]: Well you know, you're right there, you're wrong there, do it this way". So that might've made it more useful, I might've ended up using more of the skills in practice' (Site A, SH 53).

In contrast,

'The course made me find someone with the skills to practise with. I was practising on the patients as well as on colleagues. Then I had colleagues come and watch me practise. I found the doctors who were doing their exams, who had to revisit all their skills themselves, were the most helpful. It was quite nerve wracking to be watched but they would watch me and listen to what I was doing and then ask me about it afterwards. I was way out of my comfort zone. They assured me that at first it all seems so stylised, a bit odd, but eventually it would come and you just know what you are looking and listening for'. (Site A, NP 45)

Selecting the mentor was considered to be very important

'I chose her because she had a lovely way with the patients, very competent, valued her opinions, shared educational interest and felt comfortable with her (Medical Registrar). I asked her to take on the role and she willingly agreed. We would identify patients on the ward round and she would come back after lunch to go through the assessments. We were careful to select patients who were not too unwell, too tired or were just about to go home' (Site A, NP 43).

Although the mentors valued their role and took pride in being invited to facilitate the student on the Physical Assessment Module, it did place an additional strain upon them, notably in finding time to work with patients in clinical care, especially if the mentor and mentee were working in different services.

'I think the biggest difficulty is getting release from clinical time and clinical commitments to do the mentoring and supervision and provide the amount of practise the students seek. These days most have a nurse and medical mentor. I think this is good as you can then get exposure to the medics clinics and practice alongside a nurse and get to see how the nursing element comes in' (Site A, SH 42).

We set times to work together and it was obviously difficult because we both had a clinical workloads and my mentor's work involved emergency response work. So we attempted to plan [to work together] when I had a clinic so I had more time. In the main it was done in our own time, at the end of a day's work' (Site A, alumna 46).

'The night practitioners found it particularly hard to find a suitably qualified assessor. The medical staff were very supportive and the Nurse Consultants were able to help when they rotated back onto the day shift' (SH 48 reporting feedback from SH 49-52).

On completing the course one nurse specialist described how difficult she felt it would be for her to undertake the role of mentor:

'It would be difficult for me to be a mentor because my skills are so highly specialist and probably would not match anyone's need. I could offer that more effectively within the national network of clinical nurse specialists (Site A, NP 54).

This indicates how much individuals felt they needed to keep their skills fresh, notably when teaching others. However, this mentor found that the act of mentoring did just that:

Yeah, I was just developing my confidence [of being a mentor for the first time]. It's quite good. It's part of that learning. ...particularly because of the types of patients that I see. You almost do an abridged assessment, so when you are a mentor, you go back to the formal way we were taught. I did a small amount of teaching on the course, so that was good for me to do that as well (Site A, alumna 42).

The value of the practice educators to support learning in the clinical laboratory and out in practice received many plaudits from the participants. This was even more important when the student had difficulty either finding an assessor or mentor.

'The number of assessments. At first it was 27 (nine systems, 3 assessments for each one) and I am aware these have been reduced, but it was such a workload for the students as well as the mentors! It was an onerous task fitting it all in. It was really important to have the Practice Facilitators as they then started to do this. At X, they overcame this by practising in the skills laboratory on each other and the tutor assessing our technique to ensure we had reached the required standard' (Site A, SH 42).

'The assessment aspect was difficult. When you are trying to organise clinical time when you are practising skills and then organise an assessment as well it was quite a lot to try to pull together on top of a busy clinical role – whereas the OSCE approach is already structured for you which is really helpful' (Site A, NP 41).

When the practice facilitator role was withdrawn this had a significant impact on the students (as well as the practice educators).

The students felt aggrieved by the withdrawal of the skills facilitators by the SHA. They worked with them in the class room before they were withdrawn but they hoped they would have a couple of hours on a general ward with the Practice Facilitator. ...They were all very nervous. These were experienced nurses with good communication skills and could initiate an intervention very quickly but when they move into new roles they are a little bit nervous. The PFs know people and they can make the introductions a little easier and their presence on that ward valid. It's gaining the access permission through the links the practice facilitators have. They are now finding it a little more difficult to gain access to patients to practise [these skills]. This saddened them. This sent out the wrong message from the SHA and although I'm sure it wasn't intended, it gave the impression of being under valued. (Site A,SH 48).

However there was a general impression that people valued the role of practice educators and welcomed their return to clinical practice:

We need practice educators back in the NHS to support the students with their practice. I believe that would make such a difference. To consolidate their knowledge and working beside you to check out the skills. It has never been as bad as it is now. Most of the specialist wards are run with bank or agency staff and they scarcely have time to check the student is all right let alone undertake any clinical teaching or assessment. ...they are doing their best, but its not adequate' (Site A, NP 46).

Making connections with individuals and facilitating integration into the clinical team to practice the PAM skills were seen to be crucial and a valuable part of the role of the Practice Facilitator. However, the next important source of support were the alumna themselves acting as practice educators to the students. One alumna was awaiting to be called up as a mentor:

'I am disappointed that no-one from the University has contacted me to ask me to mentor a student ... I think that it is hard for people to approach you unless they know you, especially from elsewhere in the hospital' (Site A, alumna 45).

This has significant implications for following up alumnae and ascertaining if they are happy to facilitate students on subsequent cohorts, especially when they work in specialist areas. It may be that individuals feel their skills are too specialised and non transferable (and thereby have not been able to maintain the full range of skills to either teach or assess their colleagues), but equally some alumnae were keen to keep the range of their skills current and refreshed by mentoring or teaching the skills to others.

3.9 Patient feedback on the services

The patients valued the input from the practitioners. Although they did not talk about the physical assessment so much as their overall role, they did value what this meant in terms of them being able to change or initiate treatments and their detailed understanding of their underlying disease and consequent health problems:

'It is a wonderful service in normal hours. My biggest worry is that the service is not available at the weekends and over Bank Holidays because that is when the GP service breaks down as well. No one can find your notes and people you haven't seen before come out, so if you get in trouble around those times that is when you really want the team. I woke up Good Friday and had gained weight, was feeling breathless and coming down with flu. It was simply a matter of dial 999 there was nothing else to do. You feel left out on a limb and haven't got any support then. I have had to go to hospital as an emergency 6 times, each time at the weekend. ... She knows I am a delicate case. I can't tolerate much alteration as I have diabetes as well as some sort of renal problem. But the [CNS] has everything at her finger-tips and can juggle everything I need so well. She always writes an extremely good report and copies me into letters she sends to the GP. In this way we can keep a copy of the blood results as they go up and down (A, Patient 55).

She understands about all the drugs and the implications of taking them. Doctors, I feel, are less sympathetic to me prevaricating about which course of action to take. She is so patient and gives me time to make a decision. My husband and I need to go away and discuss this. I still can not decide, I am so afraid of the side effects and want to be sure that they would not be worse than the ones I experience from the [disease]. (Site A, Patient 59).

They listen to any worries that you have got and then try to sort them out. If you are a bit down they listen to you. ... They make recommendations about my medication and refer things to the doctor if they don't know – or

get me to see him if they are concerned. They provide lots of suggestions for different things like managing the sickness (A, Patient 57).

The nurses who provided this service were aware of the value they added for the patients:

‘Patients value the time – it’s a slightly longer consultation and it is quite focussed. I think they feel that there is someone to talk to who is listening to them. Also they are seeing the same person, with one or two of us covering so that makes a big difference. Sometimes if they go to see the Consultant they are reviewed by a junior doctor they have not met before,. [The patients] can see what we are doing and we can see where they are heading. ...

Often the patient comes with a family member and often we include them in the consultation. A lot of the telephone support we provide is to family members and that is equally important because they can do an awful lot for us in terms of keeping the patient well – but we can do a great deal for them [the relatives] in terms of support’ (Site A, Alumna 41).

A relative described the circumstances in which such an intervention assisted them:

‘We both get worked up into such a state at home. I shout at him and he shouts at me. We get desperate at times and X is there to sort things out and then he is a different person. Because she can give constructive help which I can’t give at times.She has this sort of warmth. You’re not a number, you’re an individual, a person. (Site A, Relative 56).

Experience of working with other patients with similar conditions helped to confirm to relatives the expertise of the practitioners. The nurses’ depth of understanding about their condition was an important component the relatives valued. In addition to specific advice, the nurses were able to offer a sympathetic ear to the carers’ / relatives’ concerns about the chronicity of the condition and its impact on their family’s lives:

It is so frustrating at times taking care of him. It gets so lonely. I’m isolated and can not get out much. The fact I can ring X makes all the difference. She is there when I throw a wobbly and can offer practical advice about what to do in certain circumstances. Because she is [a specialist] I trust her completely, which is more than I can say for the district nurses and the GP who don’t really understand his condition as well (Site A, Relative 60).

She cuts to the chase. We have known her since the diagnosis and over that time we have built up a close understanding. She gets straight to the problem, no messing and tells us straight what we can do. I value that frankness. It makes you feel safe ... no flannel just bumpf! This, this and this ... you can understand that and if not we can call her back

and we see her every three months anyway. She is very professional (Site A, Relative 61).

The value in being attended by a specialist was also picked up by another patient in a different nurse led clinic.

You see she has specialist knowledge whereas the GP has to flit from, one thing to another with lots of different people, there is so much for him to know and to do so its not surprising that he doesn't always hit on the right thing that is very obvious to X (Site A, Relative 56).

Patients described how the service provided by the specialists in nurse led clinics helped them to cope with their condition. They were less vocal about the physical assessment skills the nurses used to inform the treatments. Indeed patients and relatives seemed surprised that what the nurses were doing may not be 'routine', they simply assumed this was a component of their advanced and specialist skills and area of practice. Indeed whilst observing the nurses undertaking the physical assessment of patients in this clinic, it was easy to see why the patients might not consider them other. Their practice was fluid and deliberate, punctuated only by conversations about their wellness and guiding questions to probe and initiate further investigations. In short, the practice was so embedded within the consultation unless you specifically set out to watch for it, you would not know that it was relatively new practice.

In summary, the patients evaluated the whole performance of the nurses rather than specifically recognising any one element of their practice. However, it was the physical assessment skills that often provided the information from which these nurses acted and on which the patients then based an holistic judgement of their care. These can be summarised under the following conceptual headings:

- Continuity provided by the nurse specialists in nurse led clinics (and in some cases picked up from initial diagnosis on the wards)
- Personalised care based on the gift of the longitudinal relationship which enabled comparison at each out patient review to gauge their condition relative to their last visit
- Where deterioration was detected, action was taken to change medication or provide further support to provide help in the home
- Capability to 'independently' change treatment based on monitoring of condition
- Telephone contact to discuss concerns and receive guidance
- Information on disease management and treatment options
- Specialist knowledge – advice, strategies for managing situations
- Listening skills – a sympathetic ear (notably for relatives)
- The creation of a forum to meet up with patients suffering from similar problems

One patient summarised his experience of care within the service:

'The trouble is with my condition you have to fiddle with the tablets to get them right. X manages this so well and we have such confidence in her to do this. ...I would rather see her than the GP to be honest. I hope I can keep X for the rest of my life. I've got confidence in her, I like her, She knows me. I know her...I'd be absolutely lost without her. (A, Patient 55)

3.10 Wider training of physical assessment skills

There was a general consensus among the people who were interviewed in this evaluation for the need to increase the number of people who had physical assessment skills. Although the level and detail to which these alumnae had been taught was thought to be too advanced for the majority, it was considered imperative that a greater level of understanding of basic physical assessment was required by all nurses.

'Foundational skills need to be taught to pre registration students. I feel that basic skills should be mandatory and that then nurses could go onto acquire more specialist skills. More importantly, we need to convey a more positive attitude so that students recognise that they as nurses have huge potential to achieve care services for patients and seize every opportunity. But I am confronted with so many who are disengaged intellectually, some to the point of ignorance, and that is when we get disconnected fragmented care' (Site A Manager, 44).

'If you are an advanced practitioner you need to have some specialist background in terms of physical assessment, but I also think that all nurses need to have some more advanced assessment skills beyond taking the BP and pulse. I feel at pre registration they should be encouraged to listen to chests, to listen to the apex and even if they do not know what the sound means report any abnormality' (Site A, NP 46)

'I think we should be doing this in pre registration courses. In other countries they do it. Why don't we? It seems second nature to them and then they can be taken to a more advanced stage' (Site A. NP 45).

However, others were more cautious about the emphasis this aspect of training was given

Not at the sort of systems level we were doing – I think patient assessment in its broadest sense and thinking more explicitly about general haemodynamic status and respiratory status abdominal assessment in a non invasive non touchy sort of way that I would hope that a nurse would recognise when something was abnormal. So more explicit about those aspects – but the level of systems assessment that we were doing, no! I would worry that people were going to miss nursing aspects. You have to be aware of what you are preparing people for and if they are not going to use it in day to day work – what is the value of going to that level? But, if

you get them to a lower level that is more comprehensive and that they could use day to day that would be better value (Site A, Alumna 41).

Other programmes were considered to provide this type of foundational skills for continuing professional development:

‘I would recommend the ALERT course in preference for staff nurses on the ward. That is a one day course with scenarios based learning. However, if I was a nurse in a new role, a nurse specialist or on the hospitals at night team or running a nurse led service, I would think the physical assessment module is a good thing to do. However, there are elements of both the ALERT course and the physical assessment modules that could be taught on pre registration programmes. If you talk to the overseas nurses, they are actually very practised at the physical assessment skills because they are taught them from day one. So my view is that it should be integrated from day, teaching the fundamentals, the principles of auscultation and palpation, and then perhaps a stage two after you qualify, to go into things in more depth and take things up a gear’ (Site A, SH 42).

Whilst others in specialist environments took the view that sharpened physical assessment skills were essential, especially where medical cover was changing.

‘My colleagues who are shift leaders [for ITU] are applying to do the physical assessment course because they are the interims between the doctors and the nurses. Certainly at night when are doctors are on the wards, seeing patients and or there is no doctor on the unit, its the shift leader who is making the assessment of whether the ventilator settings need changing or the patient needs filling, or if it something more serious and we need X-rays and the doctors back to deal with the situation (Site A, NP 45).

And also took the view that ward staff needed additional skills to help them focus medical assessment when a patient’s condition was deteriorating.

I feel it would be useful to people on CCU certainly Cardiac HDU and all the practitioners in A/E, But I also think we need to offer a foundation course to the ward staff. I mean we have to send in outreach and by the time they get called in the patient is almost at the point of no return and we have to ventilate them. They get picked up too late. The nurses are too scared to challenge the doctors even after the ALERT course they do not feel their skills are keen enough to challenge a doctor who says: I’ll take a gas and reassess in two hours, or if they ring for a doctor they do not have the language to [frame the] problem to make him aware their is an acute problem and he needs to come and see the patient now (Site A, NP 47).

From the perspective of the medical staff

'I think it is a good thing [physical assessment for nurses] but if we could train our junior doctors better would nurses need to do this? On the wards nurses are so busy doing other things which means that some of the basic care is not there' (Site B, Medical Mentor).

'Assessment is part of a whole process. You need to understand the history and do the clerking to understand why the patient needs the surgery. You have to do the whole thing and see it through, you can't do just one bit of it. If a nurse was taking on that role she would be the same as the junior doctor and would need the same medical defence insurance' (Site B, Medical Mentor).

Finally, all were in agreement that those who went to do the training should be able to apply the skills back to practice. Failure to do this was considered a waste of time and effort for the practitioners and money for the Trust. This was particularly evident where practitioners were sent on the programme in advance of the organisation either setting up posts to use the skills or sending them from a Trust where the culture was not yet ready to embrace practitioners working differently. The problem was not isolated to nurses undertaking the physical assessment module:

'This is consistent with the Ambulance, Emergency Care Practitioners. Two people were sent off from that service to undertake that programme which included the physical assessment module and then found when they came back into the service no ECP post had been commissioned. This just demonstrates the organisational lag to enable people to practice their skills and it all seems such a huge waste of money' (Site A, SH 48).

3.11 Summary comments

- Practitioners working in autonomous roles were more likely to use the skills they had gained on the physical assessment module. Where the organisation supported their use, night nurse practitioners were able to apply their skills.
- The most commonly used skills were respiratory, cardio vascular and abdominal assessment. However, neurological assessment was used by nurse specialists. Night nurse practitioners reported using the greatest repertoire of skills because they were called upon to assess patients from across the hospital.
- The turbulent environment created by turn around and cost savings meant that some practitioners were less willing to step into new roles and acquire advanced skills especially if they considered these roles to place them at greater risk or were not rewarded with either promotion or financially.
- The physical assessment module is a model of responsive education provided by the Universities and developed in collaboration between the SHA, local Trusts and Nurse educators. However, these programmes are

expensive to run in resources i.e. specialist equipment and experienced teachers to deliver the module content.

- Mentorship could be problematic and was mainly drawn from medical colleagues. The hope that alumnae would act as mentors to subsequent cohorts of students was not realised because of difficulties in negotiating times for supervision and where alumnae felt under confident in their skills to act as a mentor.
- Mentorship by doctors had the added advantage of ensuring medical colleagues understood the extent of the practitioners skills. However, this did not substitute or personal knowledge and confidence in the practitioners to whom physical assessment had been delegated.
- Professional experience and maturity helped practitioners assert their findings and also helped the practitioners to articulate their role within the team.
- There was a temptation to see that all nurses would benefit from more physical assessment training, but the level to which they could then apply these skills needed to be balanced against their existing knowledge base on which this technique could be applied. Furthermore, the professional maturation of the practitioners was considered imperative to enable them to cope with the additional responsibility, accountability and autonomy associated with undertaking physical assessment that lead to diagnoses or clinical decisions.
- The skills needed to be used regularly or they became redundant. This has implications for what is taught to whom and at what depth.
- The use of physical assessment skills was considered to enhance nursing performance rather than a form of medicalisation of roles when the nurse had a strong professional nursing identity and confidence in her nursing knowledge.
- Front loading skills for practitioners who were then unable to use them because the organisation did not have appropriate roles or where the culture was resistive to new ways of working, was considered wasteful to all concerned.
- Patients highly valued the input from the nurses and appreciated the continuity this provided and the personalised care packages they offered. They felt this increased access to the service and in many instances supported greater independence in managing their illness. Patients were confident that they would be referred for medical assessment if their condition became too complex or outside the remit of the nurse who had assessed them.
- Relatives highly valued the care provided by the practitioners and felt greatly supported by them. Access to telephone consultation and visits increased their confidence to continue their caring role, even when the patient's condition gradually deteriorated.

4 The Community Case

4.1 Background

NHS Coast¹⁴ was established on 1st July 2006 bringing together two Strategic Health Authorities in the locality. On 1st October 2006 SE PCT was formed comprising the five areas that were formerly PCTs in their own right. One PCT elected to form a Social Enterprise Unit, and became a separate body on 1st October 2006. The purpose of the Social Enterprise was to deliver 'not for profit' community nursing and therapy services under a contract from SE PCT. The Evaluation of Physical Assessment Training For Nurses in New Roles Project was therefore conducted at a time of major organisational change in the locality. Gaining Research and Development approval to proceed with data collection following COREC/ NRES approval in November 2006, took three months in Site C and six months in Site D. All of the data were collected between June 2007 and August 2007.

4.1.1 The locality

The community case study site was undertaken in an area of relative affluence in the SE. The population in the locality was growing with an increasing number of residents over the age of 65 and a life expectancy over the average for England (See Table 4.1).

Table 4.1: population statistics

- Population Growth: In 2005, the County was estimated to have a population of 1,075,500 projected to grow to 1,104,200 million people by 2011, an increase of 2.35% on the 2006 population estimate.
- Those aged 65 and over were projected to increase although at a slower rate from 2010.
- The average life expectancy in this locality was significantly better than the average for England but there was a 5.4 year gap between those living in the fifth of wards with the highest life expectancy and those living in the fifth with the lowest levels. (SE PCT, 2007a).

The PCT were in turnaround at the time of setting up the research struggling to make savings against large deficits estimated to be £26 million across the County (SE PCT, 2006a). In January 2007, one Community Trust had been awarded pathfinder status from the Department of Health's Social Enterprise Unit that brought additional funds for set up costs and additional money made available for legal advice and business training. The PCT employed 3,000 people providing a range of services from school and district nursing, specialist nursing, therapy services and services for adults with learning disabilities and community matrons. The PCT was responsible for commissioning acute, community and mental health services as well as contracts with local GPs, dentists, pharmacists and other professions allied to medicine. The budget in 2007 was set at £1.2 billion (SE PCT, 2007b).

¹⁴ This is a pseudonym.

Pathfinder status required the PCT to provide innovative ways to deliver care under the social enterprise banner, meaning all profit was reinvested back into the service to expand provision. Thus business principles were deployed to achieve 'public benefit', forming what is known as the 'third sector' (a third way between private and state provision). The ethos behind social enterprise units was that plurality of provision was perceived to enhance diversity, in a competitive health market to enhance choice and improve quality (CSP, 2007). Importantly, in the PCT Social Enterprise, the business unit responsible for providing services was separated from commissioning and 'owned' as a company by its employees (CSP, 2007). This provided the footing on which tight financial control could be exercised whilst driving forward innovative services. However, as the first large-scale public sector to assume company status as a social enterprise, concern was expressed at the risks of an untried transfer of this scale. The challenges included consolidating core business whilst exploring ways to diversify income and spread the risk. Complex issues around employer status and pension transfer benefited from the direct intervention of Patricia Hewitt, the then Secretary of State, but some issues remain unresolved (CSP, 2007). Commentators expressed concern that this was privatisation by the back door (McIvor, 2007) and the speed at which this happened left the Unions and Professional organisations concerned about employer status, continuity of service, and future collective bargaining power (CSP, 2007). The impact on staff and clinical services in the event of commercial failure was untested and this created a great deal of anxiety for staff, not least of which was their concern for the long term welfare for their patients. The managerial hubris by which such vision was driven left these risks reconstructed as 'challenges' and 'opportunities'. A new genre of managers, subject to considerable business advice and training from their Department of Health mentors, mastered the new language of social enterprise and set their path on a single direction of travel: the commodification of community services traded to commissioners for profit. Undaunted by their ambitions, they committed themselves to changing provision around to a 'Community driven NHS' (SE PCT, 2007b).

New roles and new services were the key by which this ambition was to be achieved (SE PCT, 2006,b). Locked into the government's modernisation agenda, policy and construction of the 'third way', an unswerving determination to follow this through filtered down through the managers (Stakeholder Conference, October, 2007) A single direction of travel, pursuing a business philosophy that upheld that view, left people who previously managed patient services fostering a language and principles that were perceived as contradictory to the foundational principles of the NHS. Those under such direction, weakened by repeated rounds of competition for jobs¹⁵, became compliant and critique was silenced or ridiculed as 'old fashioned' (Stakeholder Conference, October, 2007). This was not a happy place to work as individuals struggled to cope with the cognitive dissonance created by such a fundamental shift in philosophy surrounding health care provision and employee

¹⁵ One participant described how she had been through four rounds of competitive interviews in less than 18 months. On each occasion she found herself applying for a new post, as the one she had just acquired had been reconfigured by the Trust. On each occasion she was in direct competition with her peers who as a result of being unsuccessful were either made redundant or were slotted into more junior posts (Focus Group, September 2007?).

relations. Subject to forceful demands to reconfigure roles, one alumna referred to her professional values and place beside the patient

“...I felt that district nursing was being considered ‘no good’. I’m passionate about District nursing. It is what I really believe in, and that’s what patients really love, the fact that they have their own nurse, their own team around them...” (Alumna 6).

Innovative services, delivered by different people, in new ways, created opportunities for staff in this context. However, to match the ambition and scale of change, increasingly less experienced staff were being asked to adopt approaches that had previously been delegated to senior and more highly qualified staff. At the close of this research, District Nurses were being asked to deliver services previously provided by Community Matrons who had undertaken the physical assessment module (Stakeholder Conference, October, 2007). Indeed, an expectation was made that staff nurses should exit their pre-registration programmes with equivalent qualifications and skills to the physical assessment module. Such skills were considered core rather than supplementary, and as such, continuing professional development to provide them was considered a short-term intervention. The place of experience, clinical wisdom and an established understanding of inter-professional working in the community context held no place in the re-engineered services, as this demanded too great a time lag to achieve targets and the desired market position.

This was the political backdrop into which the physical assessment module was commissioned and delivered. It represented a significant shift in the working context for staff who undertook the module and then sought to deliver a new service back in the Trust. Relationships between the Trust and the HEI providers, the Trust, the HEI providers the SHA who commissioned the module were in a dynamic state of change, with both the Trust and SHA in turnaround.

Uncertainty plagued those who undertook the module. For some it provided additional security as they acquired new skills to fit them for new ways of working. For others, this created insecurity because they were uncertain about their accountability and vicarious liability within the new social enterprise experiment. However, despite this potentially inhospitable learning environment, practitioners did acquire the new skills on the module. One alumna summarised the experience:

“There’ve been so many changes in the last year and a half, it’s been a nightmare, and those have created lots of challenges...as an individual it’s just getting to grips with a completely new role and sort of trying to work out how to approach it. ... at the same time as learning a whole load of new skills, one of which was physical assessment, case management, disease management and all that sort of thing as well.” (Alumna 1).

The case study sets out how the alumnae achieved this and is a testament to their great enthusiasm and determination, the support they encountered from their

colleagues and practice educators, and their personal drive to improve services for their patients.

The recruitment of staff to participate in the research was significantly affected by the context of change that surrounded the practitioners at the time of data collection. Staff were feeling overwhelmed by their workload and were suspicious of any outside observation of their performance. However, 8 alumnae were recruited to the study and 13 observations of patient assessment were completed supplemented by 13 face to face interviews with patients about their experiences. Three relatives also provided commentary about their expectations and experiences of the service. A further 10 colleagues and managers participated in the study providing a 360 degree perspective on how the physical assessment module impacted on practice. A further 20 people participated in the focus groups held in September 2008. Although the sample size was less than was originally intended, the researchers were satisfied that the core issues were uncovered by the evaluation.

4.2 Characteristics of nurse participants/ alumnae and their reasons for undertaking the physical assessment module.

The alumnae were all experienced practitioners. Six undertook the level three physical assessment module and two had completed the MSc level module as part of their MSc in Advanced Practice. Seven of the eight alumnae had worked as district nurses, four still had district nursing roles, and one alumna had been a practice nurse before becoming a Nurse Practitioner. The alumnae needed to undertake the physical assessment module to fulfil requirements of the community matron, Nurse Practitioner or specialist nurse roles and many viewed the course as motivational.

“...I think we’ve all enjoyed it. ... it was time that we learned something new to give us a bit of a kick, meet new people, learn some new skills, you’re being topped up with some development rather than it just being staff nurses who get on vital courses so that they’ve got the skills. It increased motivation, which is always a good thing” (Alumna 2).

This community nurse manager described her personal motivation for doing the physical assessment module

“...I am a practice teacher and I didn’t want to feel that the specialist practice student was learning things that I didn’t have the knowledge of myself” (Alumna 3).

A district nurse explained her reasons for undertaking the physical assessment module as follows,

“I wanted to do it for me. I wanted to use my background and experience and I wanted to expand my knowledge base. I thought that as our role is

changing and evolving, it might be useful ... the GPs trust my judgement and they have confidence in my abilities.” (Alumna 4).

Conversely, Alumna 7 enrolled for the physical assessment module with some hesitancy:

“I must say that I was dreading doing the course, I thought ‘oh no, I can’t bear doing another course!’. And yet, it was the best course that I have ever done. It was so good, because I suppose it is very black and white. You do know quite a lot of it anyway, (The tutor) was very good at teasing out the important bits.” (Alumna 7).

Alumna 7 described why she had opted to take the level 3 physical assessment module, as she felt the skills acquired would be more appropriate for her job. A community matron (Alumna 2) who’d successfully completed the Master’s level Advanced Assessment module reflected that undertaking the level 3 module *prior* to the master’s programme would have afforded more time for rehearsal of the skills without having to move into differential diagnosis, and development of treatment plans etc. The issue here was that it was a major leap to undertake master’s level with no prior experience of systematic assessment, and that it would have been less stressful if the level 3 module had been completed first.

4.3 Alumnae’s Views on their New Roles

New roles such as community matron were being developed in Trusts undergoing major organisational changes. Practitioners in role expressed personal investment in them being evaluated as successful. Core to their new roles was the capacity to undertake physical assessments of patients who were suffering from chronic conditions and managing their care. Therefore, when they spoke of the outcomes associated with the module, invariably this brought into focus the way in which they functioned in their role and how that was evaluated by the Trust. One of the key targets for them was to reduce the number of hospital admissions for patients on their case load. The criteria for admitting a patient to the community matron service, set by the PCT included:

- aged 65 or over
- two or more chronic conditions,
- or three out of 12 other listed circumstances including: hospital admissions, casualty visits, ambulance call outs, falls, GP concern, patients taking four or more medications.
-

One Community Matron described how the consultation skills and systematic history taking they’d learnt on the module were invaluable to their new role:

“I spend hours on the phone to social services, to opticians, hospitals. Sometimes I would go in to hospital and liaise with staff to get them [the patients on caseload] back out again sooner... when I was new to the role, and learning more about COPD, I used to go with patients to their hospital appointments that was useful, but it was also good to

network and get to know the departments. We have set up links with A&E which are very useful now. We get all the admissions or admission to A&E from my surgery through on the computer weekly. ...I had to zip up my computer skills a bit, there's lots of data entry, proving our worth, you have to do all that sort of thing and producing graphs and all the rest, so that's all new....I've just used more communication skills, and since I've started this role feel more comfortable, less of a novice with my advanced assessment skills now. I use the advanced assessment skills virtually every day.” (Alumna 2).

However, at the outset, identifying suitable patients for the Community Matron's caseload was problematic. Alumna 1 explained:

“We've gone through various different ways of getting patients... and we've been getting figures through from the PCT of people who've had two or more admissions but that's not really ideal. [At first] we were taking referrals from anybody and everybody. It's constantly evolving, but mainly from the GPs now. ... There's a lady that works for the PCT in Casualty and she acts like a triage nurse to see if there are any other services that could be used rather than actually admitting to hospital. ... that's before they get signed on in the A&E department. If she gets people coming through she will send out casualty forms to say that they've had these admissions. When we get up to two admissions we can flag up and see whether they're suitable to take on to our case load.” (Alumna 1).

The pressure to identify a caseload and then identify the way in which the new service provided by the Community Matron made an impact on targets was ever present as this manager explained:

“They manage their own caseloads... first, from a pivot cube that was run by the IT people. They were trying to get them to run the combined portal, but otherwise they're GP or District Nurse referrals, even Social Services and from the local care network. But although they've been around for about six months it's still very new. They're still struggling. They're having to do courses and have a full caseload and it's been difficult. ... because we've come out of a PCT, there was a turnaround plan and part of the turnaround was that we had to meet targets, so they've been pressurised to meeting the caseload targets recently.” (Stakeholder 1 Manager).

However, the novelty of the role initially made it difficult to enlist a caseload, first because of the difficulties in physically accessing the IT equipment to download information, but secondly, because staff did not understand the nature of the role and how they fitted into the team:

"I've always gone into the GP surgery and I've been given this room because I'm the [community] matron. ... all of a sudden there weren't any rooms available so I was sitting at the front desk 'oh you can't sit here' and I moved along a bit, 'oh no you can't sit here', and I just said to the receptionist in charge of the surgery 'you can't find me a little space where I can sit?', you know I don't mind where it is but if I can just come in and just sit there and I'd like it attached to a printer that would be great, 'oh you can have this one, nobody likes sitting in this desk' and it's right in the middle of reception, everybody trips over you, you've got to put your bag and your coat right under your desk, 'oh hello X could you?', 'is it possible?', and the amount of people that speak to you and the biscuit tin's in front of the desk and they all come along 'oh hello, who are you, what's your name', and then one of the telephonists said 'it would be a good idea if you wore your ID card right up here, your name' so that's what I do." (Community Matron Stakeholder 4).

This community matron organised her workload to overcome these difficulties by dropping by the surgery in between patient visits at strategic times when she knew she could liaise with her colleagues about suitable referrals (GPs and DNs) and get a better chance of getting information off the computer. Although she felt that the community matron role was exciting, she also recognised that it was

"...a very difficult concept and we've done one presentation to the district nurses and allied professionals but we also need to do reinforcement sessions every three months because you get different people at meetings and because of the speed at which the role is developing." (Stakeholder 4).

However, even when a Community matron successfully recruited a suitable caseload, maintaining an accurate record of how many patients were on it was not straightforward. A full time community matron described her current caseload as:

"53, at the minute some of them are false in so much that they've been identified, I've contacted them and that's where the relationship has finished and now, (Alumna 2) and I are striving to gain a real working caseload of people that we see and are actively managing".
(Community Matron Stakeholder 4).

Having a prescribed number on the caseload was not considered helpful by the nurses because patient dependency and complexity was thought to be far more accurate in terms of workload

"...to say you must have X number of patients isn't helpful. I think you need to take on as many as you feel clinically able to manage, I'd rather give 100% to 20 people than trying to spread myself thinly. ...I'm half time. I'm supposed to have 25 [on my caseload] I think they decided in the end, whereas I think I've got about 18 or 19, but there's probably about a dozen that I see very regularly. I've had a gentlemen

that takes hours, and he's a very high user but he's not needed any other services because I go in there religiously every two weeks, more often when he's unwell. He's got a really good partner and if she has any problem ...she phones me on the mobile. ... The majority I can't discharge because the disease doesn't go away, it's not like: we've cured you now! I can discharge you! If you're seeing the patients in that top 3% with all those chronic conditions how could you build up that relationship, have that really intense one to one and then say 'bye' call me if you have a problem? I lengthen the time between visits once we've got over an acute episode, but I do gear myself to what they feel comfortable and supported with because they have a lot to cope and if half an hour out of my day is going to help then that's what I need to do." (Alumna 6 CM/DN combined role).

However, such a stoic position and clear expression of nursing values was increasingly challenged as more management systems were brought in to ensure greater parity and equivalence in provision and as the pressure to achieve targets mounted.

4.4 Impact of the physical assessment module on the alumnae's practice

Seven of the eight alumnae reported that they used the skills gained in the physical assessment module in their current practice. A change to a management role was cited as the reason by the alumna who was not currently using the skills.

Those who used the skills stated that the learning on the physical assessment module were crucial to their roles as community matrons, nurse practitioners, and specialist nurse, but a number also highlighted that physical assessment skills were of great value to district nurses. One alumna stated that if she hadn't become a Community Matron she would still have wanted to undertake the physical assessment module to assist her in chronic disease management in the district nursing role (Alumna 6).

The notion of undertaking systematic assessment and how to formally approach a consultation were important aspects of the learning from the module:

"I think having done the course and learnt more about the structure of a successful consultation I can begin to put that into practice whereas before it was fairly ad hoc. You still start out just generally getting to know them and then you can move on to the questioning. Doing the physical assessment is really just confirming what you've already learnt from the history and other information." (Alumna 1).

Alumna 3 had undertaken the physical assessment module whilst in a clinical role and drew on it when she was supervising a DN student, but since then had moved into a management position.

“I had a DN student at the time, so while I was learning, I had a student and so she also had a physical assessment element to her course. And so, we went out together and that was helpful because we were meeting her needs as well and I feel that we were doing something constructive. Whereas if she had been doing the physical assessment element of her course, and I hadn't, then you felt, there was a deficit in my knowledge, so I found it helpful.” (Alumna 3).

An experienced district nurse stated that the physical assessment module had enabled her to make diagnoses:

“I've been around for years and some of the things you tended to do anyway, but having done the course and got all the theory and the practice behind it, it is more detailed and more complicated and now I am making a much more competent diagnosis. Now I am more holistic, more thorough, more in depth. I still do the DN assessment, but my questioning is more involved” (Alumna 4).

A Nurse Practitioner working in a GP surgery described what she had gained from the advanced physical assessment module was in doing: “more organized examinations of people, going through systems in a more regulated manner.” (Alumna 5). As an outcome she felt:

“more confident in my judgment [since completing the module]. I don't know if I'm picking up anything different or anything more than I would have done before, but I'm happier doing the examination and then referring people on, having, I suppose, written things up in a more comprehensive way, that's more in 'medical speak', so that my writing's formed correctly. Part of that's to do with terminology and having the confidence to do stuff and refer people on.” (Alumna 5).

“...having done the course, I do know what I'm looking for and listening for, I know the signs to look for, which you might have sort of picked up along the way before, but it just formalises it. But you need to do the course to get everything out of it.” (Alumna 1).

For her, the key learning came from sitting in on her mentor undertaking patient assessments, having the background to their condition explained, and then guide her to listen for important auditory cues whilst she was supervised undertaking an assessment. She felt that without the status of student on the module this would not have been possible. (Alumna 1).

4.5 Comprehensive versus selective use of physical assessment skills.

When asked which clinical examinations they used, all the community matrons reported using cardiovascular, respiratory and gastrointestinal systems assessment regularly, and some added that they used neurological, musculoskeletal, dermatology and mental health assessment quite often.

“...I’ve done neurological, not the cranial nerves, but I’ve done sort of tone, power and reflexes on a patient. Musculoskeletal as well, somebody who’d fallen and just to make sure they were ok.
... It’s the respiratory and cardiac that have been the mainstays.”
(Alumna 1).

District nurses who had completed the physical assessment module predominantly used respiratory assessment, abdominal, cardiac (although listening to heart sounds was less likely) and ear assessment in their everyday practice. However this was dependent on who was on their caseload at any given time, a finding reported by Community Matrons as well.

“...they’re a whole mixture of everything really. Quite a lot of COPD, I’ve got quite a lot of end stage cardiac failure, I’ve got Parkinson’s Disease, MS, chronic kidney disease, quite a few mental health, osteoporosis sort of thing. All the patients have to have two or more long term conditions so they usually have a couple at least, often more. Polypharmacy is another. There is usually minimal input from other health care professionals, often they’re quite isolated.” (Alumna 2).

Whilst a Nurse Practitioner who led the nursing team in a GP Surgery described the types of patients she worked with as;

“...we (the nurses) do all chronic disease management. So I do the coronary disease stuff and the COPDs, asthmas, I do a lot of the diabetes, and then I’ll also see urgents on the day. ...The GPs see [patients with] Parkinsons disease, epilepsy, cancer or rheumatoid arthritis (Alumna 5).

4.6 Physical Assessment skills in use: client profiles and interventions

The following vignettes outline the type of patients the alumna had on their caseload and how they applied their new or consolidated skills into their everyday practice:

“...the first lady is a lady [has been on my caseload 6 months] with a long standing COPD. She exacerbated last week and has been on antibiotics which finished two days ago. When I saw her last week she was really quite miserable and just couldn’t get out of her room. I went today and was able to use the respiratory assessment skills, listen in to the chest, and I could hear that it was much clearer, she looked better, the antibiotics had obviously worked and I felt comfortable leaving her for the weekend. Before I took her on to my caseload she’d had four recent hospital admissions. She tended to sit on chest problems until it got too late and didn’t want to bother the GP but she hasn’t been in hospital since I took her on.” (Alumna 2).

“one patient, who was end stage cancer, and I thought that I would just listen to his chest so that I had something as a baseline. That was using

the skills in a slightly different way. One lady that I visited on a Saturday morning for something else, but she said that she had bronchiectasis and she thought she had an infection, she wanted the doctor to be called. And I thought 'Well actually, I could listen to your chest first and then we can make a decision'. And I listened to her chest and it was clear as anything. So I was able to offer her reassurance and I felt confident in my findings. And we negotiated that on Monday we would call her own GP out to check that all was OK" (Alumna 4).

In the second example it can be seen that the alumna was prepared to act to prevent a GP referral prior to the weekend, but part of the negotiation included a review by the doctor on Monday. This might illustrate a predisposition toward caution and reluctance to assume a full substitution role, it also highlights a confidence issue, wanting assurance the finding was correct, and this may seem a contradiction especially when the patient seemed to be well on the Friday. However, what many practitioners were concerned about were missing subtle changes in a patient's condition that may alert a medical colleague to a necessary intervention that the alumna considered to be outwith their sphere or scope of expertise.

Unsurprisingly, confidence grew with experience and working in areas of greater familiarity. This Nurse Practitioner explains how she gradually increased the repertoire of physical assessment skills used in her everyday work:

"Examining. I didn't really do neurological examining at all before and didn't do hearts. I was aware of what the symptoms might be but not by listening to people's hearts in the same way. ... Because of the walk-in centre stuff I feel much more confident in the boney injuries, what to x-ray, what wouldn't I x-ray. So you don't send anything like as many people to x-ray from here as you do when you're down at the hospital, but I think your levels of anxiety are different over things here in some ways." (Alumna 5).

A Nurse Practitioner described the most satisfying elements of her role having completed the physical assessment and prescribing modules and the MSC in Advanced Practice.

"...having your own caseload. Those people are yours and I feel I can now take them from the beginning to the end. I don't have to go to a doctor to sign my prescriptions. I can make the clinical decisions about them. I can follow them up. If I've got concerns then obviously I would speak to people about it, but in the end I want to deal with those people. I don't want to have to pass them on particularly if I don't have to, because it's not time or cost effective for the patient who has to come back for somebody else to do something I can do already, and I think it helps build up people's confidence." (Alumna 5).

Alumna 8, a specialist nurse described the factors which enabled her to function in her role,:

“I couldn’t do the job without physical assessment skills because of the things that I look for specifically regarding heart failure. So [I use]” cardiovascular and respiratory examination, I think I probably use dermatology after that and a smattering of abdominal examination knowledge but that isn’t something I’m confident or competent at because I don’t practice it enough.” (Alumna 8).

The effects of being able to use physical assessment skills on patients described by the alumnae included preventing hospital admissions and GP visits. The key areas that they felt they had made a diagnosis were: chest infections; heart failure; bradycardia followed by a referral to cardiologist (Alumna 1); picking up a cardiac murmur that was referred onto the GP (Alumna 4); then the skills of undertaking a formalised structured physical assessment when patients presented to a walk in centre resulting in the identification of unmet need, notably around skin, eye and a few abdominal problems. Making referrals, being involved in practical decisions, treatment decisions and prescribing were also increased areas of activity. As a result the practitioner did feel that her practice was slower, but this reflected her more thorough and detailed approach to undertaking clinical examinations.

Alumna 6 described how the acquisition of these skills gave her confidence to deal with far more acute exacerbations of the patients’ conditions and that having the accurate clinical language with which to describe the situation ensured appropriate intervention should a referral be required. But this was more than the sum of the parts as Alumna 6 described:

“... a gentleman who’s main problem was COPD but he wasn’t being managed by anybody for a couple of years. He had seen a consultant a while back, he was highlighted to me by the GP. My aim was to rationalise his therapies because he wasn’t on optimum COPD therapy so we made changes to get him within the recommendations. Before he was sleeping in a chair, he wasn’t getting undressed, he wasn’t going to bed and had been like that for months. Recently he had treatment with steroids and two courses of antibiotics and actually in retrospect, I think I could have initiated the antibiotics earlier with him because it has made such an impact. He’s got somebody to call, somebody that cares and at the end of day that’s what they need. They need one name, they don’t want to have to phone round 50 services, when I can do those things for them. [My role here was to] optimise his health, quality of life, give him a point of contact and sort the treatment.” (Alumna 6).

Alumna 8 described the purpose of a visit to an elderly lady with heart failure:

“to optimise her heart failure medication and in her case it was beta-blockers. But I prefer to think that I look at the whole person and not just the tablets but in examining someone it allows you to see what their

skin's like, you know there are lots of other little things. She's very thin and if you looked at the photograph on the wall, over time she's lost three stone in weight. And 'why has that happened?' and nutrition plays a big part in heart failure and is linked to someone's decline so it would be nice if she could maintain a stable weight. So as well as her heart failure being stable as regarding her physical examination, that clinical examination allows you to think on your feet and leads you into other parts of the history taking regarding people's diet, their bowels, their urinary function, their breathing. She has been given a ventolin inhaler and yet as far as I could tell had no lung function tests, no spirometry. Why give somebody a ventolin inhaler? As far as I could see her breathlessness was due to heart failure. If they think there's a respiratory component as well where did that come from? Communicating with the practice nurse will sort that out." (Alumna 8).

Assuming new roles could be difficult, especially when doctors were less than willing to delegate the responsibility to a nurse practitioner. This might occur because it was a favoured activity by the doctors, for example running the family planning clinic (Alumna 5); or where doctors had an established relationship with a patient and their family and wanted to continue their interventions.

Another outcome of the programme was leading practice developments. This in part related to developing and expanding practice of the DNs:

- 1) in providing paperwork to facilitated their structured assessment of the client (Alumna 5);
- 2) in supervising their assessment skills, recognising that the DNs would then need to be able to act on abnormal findings (Alumna 2)

As in the acute care case study, the alumnae described the importance of maintaining their skills, by using them in their everyday practice (Alumna 1). Possessing the advanced skills was thought to be important as this enabled the practitioner to act on her findings. Without them, the nurse was left to call out the GP to initiate treatments. (Alumna 2).

However, when required to make a referral, all identified that having command of appropriate language, terminology and having undertaken appropriate assessment findings, resulted in getting a swift response (Alumna 3). Other nurses noted the detail provided in their referral letters and recognised how the practice of their colleagues had been advanced (Alumna 4). However, in the main the nurses spoke in more general terms about how it had affected their practice:

"I felt it did enhance my practice in the way you go about the assessments. The intuitive side of nursing, I think that's what got fed. You suddenly think, 'oh I'm doing assessments in a different way' I am looking for more I am checking their lips, ... which to a certain extent you did before, but you are coming from a different place. ...I think that it does give us credibility." (Alumna 3).

“I could have listened to somebody’s chest as a District Nurse but I wouldn’t have had a clue what I was listening for, what it meant or anything. I could probably have worked out how to do it but wouldn’t have known what it was. So having done this course we can do that all the time.” (Alumna 1).

In general, the nurses described how it enabled them to undertake a more comprehensive and holistic assessment. When stakeholders who had not completed the module were trying to use the assessment tools devised by those who had they described the limitations of such an approach:

“she developed the crib sheets... She’s laminated them and they cover each system and it gives you key points and words and I’ve found those of benefit when you go and talk to the doctor you’re talking medical speak. ... I use it when I’m reading reports back from heart consultants and respiratory consultants because it’s all medical speak on their reports.but I wouldn’t get my stethoscope out and examine somebody’s chest and then refer to the GP I’m a tissue viability specialist nurse so I am happy to do a lower vein examination and tell you what the blood flow is, plus Doppler assessment in the lower limbs. ...I would scan a patient’s bladder because I have those skills.” (Stakeholder 4).

A community matron saw the physical assessment module and chronic disease management as the focus of her role,

“...I have to say the physical examination course I think is absolutely excellent. ...I’m finding is that you need more and more in depth knowledge about COPD, heart failure and diabetes, that just happens to be on my case load, everybody’s going to be different aren’t they, so with patients I want more and more information. ... I listen [to chests] all the time because I want to know what’s normal for them, because their chest’s are bad anyway, so I like to try and get a grip in my head of what is normal when they’re feeling well and then hopefully I’ll pick up things more easily and at the end of the day I have no problem holding my hand up and saying ‘I need help, I need you to come and see this patient’ and my GP will always come round, if I ring up they’ll come out and see them.” (Alumna 6).

To summarise, **the impact on practice** of learning from the module included:

- Ability to make a structured assessment
- Structuring questions to get more specific information
- Problem solving potential problems
- Recognising normal from abnormal relative to the patients’ level of ‘normal’ chronic degeneration
- Assessing patients’ conditions otherwise referred direct to the doctor e.g. Parkinson’s disease

- Understanding complex pain management set in place by the hospice team being able to describe clinical symptoms to colleagues more precisely and in detail.
- Inspired to share new skills with colleagues
- Increased confidence, sense of professional credibility and sense of place in the clinical team.
- Using appropriate medical language to facilitate communication
- Increased confidence in contributing to clinical decisions
- Being more vocal in team meetings and making a contribution
- Being given greater responsibility by colleagues

One alumna described the outcome for a colleague who had undertaken the module:

“The course rekindles enthusiasm, quite a feather in the cap really. My colleague who has done the course is just flying, developing confidence” (Alumna 4).

4.7 The impact on the alumnae’s practice: acquisition and application

The factors that were considered most important to acquiring the necessary skills included:

- Peer interaction and sharing experience with colleagues who are specialist in other aspects of physical assessment
- Course support to focus learning and guide systematic assessment
- Clinical Assessment log book encouraged systematic acquisition of skills
- Practice of assessing real patients under supervision
- Mentorship and time working alongside the mentor in practice
- The work based learning facilitators.

However this could be problematic as one alumna described:

Being able to access patients to examine was also an important way to learn physical assessment skills. “...but finding the right kind of patients is not always easy. You know, it’s pot luck on whether they come in. I mean, we resorted to calling some people in for no real reason, just so that I could examine them, but then you can do that, some of them you know. And quite a lot of them don’t mind you doing anything extra with them. You have to put them at the end of the surgery and if you spend an hour with them doing stuff then they’re usually quite happy and they feel like they’ve had a good going over, a proper assessment...” (Alumna 5).

“I could have benefited even more if I’d been able to observe more GP consultations. ... He didn’t think that that was going to be very useful for me. I may not see a chest, or see an abdomen or be able to carry out that examination in that consultation. Yes that is true, you might not. But you would pick up other clues, not just the physical exam. Questioning, history taking. And I would have liked more input with that. I did do home visits with him and they were very useful. We would both go in and obviously the patients were expecting me and I would examine them and then he would go over my findings, and we

would discuss the findings. And that was sometimes really quite useful. I was hoping that I was going to have a similar sort of experience (to that of a colleague), but it didn't quite work out that way. I think if I had had a different GP, but it was still very worthwhile.” (Alumna 4).

The support of GP mentors was highly valued to facilitate the application of theory into practice. This had the added bonus of ensuring someone in their clinical team was aware of the material that had been covered and what the alumna was capable of doing on completion of the module. However, the amount of time made available for supervision and dedicated to mentorship varied from weekly to infrequent interactions, sometimes constructed events to ensure contact. As more people were undertaking the module the burden of mentorship for GPs was increasing. The support went unpaid and unrecognised by the PCT and some alumna felt relying on their GP colleague's goodwill was problematic. It was hoped that as more alumna were available to mentor the students on the physical assessment module, the mentorship burden would shift away from the GPs. However, as less senior and experienced nurses were being up-skilled to undertake the role, the level of teaching preparation to mentor students came into question:

“District Nurses will have done their teaching assessment, but it may be that in the future there won't be District Nurses, but the [community staff who act as mentors] will have to have done a teaching and assessing module ... they'd need support, maybe from our professional leadership team, I don't know.” (Stakeholder 1 Manager).

Alumnae talked about the importance of maintaining all the skills, especially when teaching or mentoring others who were acquiring them. However, there was a clear sense that to act as mentor required a deeper knowledge and understanding across all systems and this was hard to maintain in some specialities:

“I would love to be a mentor. ...but you need the confidence and you need to be able to keep practicing them, not just the level that I happen to be. Some systems have dropped by the wayside a bit as they have not been quite so relevant.” (Alumna 4).

In addition, there seemed a genuine lack of confidence in being a mentor which meant that the alumnae wanted more time to dedicate to the role a) in direct contact with the mentees, but b) to ensure they, as mentors, were evaluated as competent:

“you don't need to be a doctor, but you need to be someone who's doing it all the time, I think to maintain credibility and for the students to have confidence in their mentor. Because if I was mentoring someone now, I think they would be thinking, quite rightly, 'what practice is she getting? So I think to make it work for the students, they have to have confidence in their mentor.” (Alumna 3).

“I’ve taken on a mentor role. I love doing the role, but there is a real pressure time wise. I know that they are desperate to get through their assessments, I’ve got someone coming with me tomorrow, but you have to be careful about how the homes see it - always taking someone in with you. ... I have had a steep learning curve, since October when I started doing the community matron role and the GP job, I haven’t really had support from my end and not 100% sure that I have got it right. What would really help me to do a better job as a mentor is protected time to do it. And the opportunity to go into teaching sessions at the university and have an update.” (Alumna 7).

Critical to the notion of credibility was confirmation of performance in the form of observed practice. Alumna 7’s impression was that in her GP nurse practitioner role she was practicing a broader range of skills including: neurological, muscular skeletal, mental health, cardiac and respiratory assessments. But as a new role, her performance had not been evaluated, and without this she felt anxious to act as a mentor. Of note, none of the alumnae saw the potential of teaching / mentoring others as a means by which they could gain such feedback and check out their knowledge. This was directed toward mentor updates provided by the University. Mentor updates were also a topic raised by the managers, but for them this was particularly important when the module was rolled out to less experienced staff (e.g. staff nurses working in the community). Continuing support from the mentors on completion of the module was thought to be advantageous but dependent on the good will of the GPs, therefore provision of a formalised on going support programme was thought to be advantageous.

When funding for the work based learning facilitators (WBLFs) was not taken up by the HEIs, their input was sorely missed by the alumnae. The relationship that students had with them whilst on the module ensured that any breakdown in mentorship through over commitment, could be redressed by the WBLFs. When this support was no longer available, it left the students struggling to find adequate support and supervision for the rehearsal and then assessment of their performance.

Other enabling factors to help consolidate the skills acquired on the module included:

- Undertaking the prescribing course would complement their use of physical assessment skills because this concentrated attention on formulating a diagnosis and prescribing appropriate treatment (Alumna 1).
- Support from the Trust with funding the module; providing time to attend college and study time to consolidate theoretical understanding (Alumna 3).
- The enthusiasm of the WBLF and course team that inspired and motivated the students (Alumna 4).
- Family support to dedicate time to studying (Alumna 4).
- Support from peers on the course
- Back fill money to pay for staff cover whilst attending the module (Alumna 5).

- Clinical supervision from clinical managers (Alumna 2)
- County wide Community Matron Network

Although some stated they would have been prepared to self fund the module, for many the expense was prohibitive. Many identified back fill money to replace them whilst they were on the module or studying was not common, and they ended up having to conflate their workload into a shorter working week (Alumna 7).

The factors that were considered to extinguish the skills included:

- Forging a new role whilst undertaking the module and building up a case-load (causing additional time pressures and demands) Alumna 1
- Management roles that prohibit daily application of skills in practice 'use it or lose it!' (Alumna 3).
- Changes to the role of the district nurse and alterations to skill mix in nursing teams meaning application of skills on a daily basis could not be guaranteed (Alumna 4).
- Guilt about taking study time when teams were short staffed and workload pressures were high (Alumna 4).
- Prolonged time between episodes of studying – adapting back to academic thinking and recall (Alumna 4).
- Confidence in skills from regular application to practice (Alumnae 4 & 7).
- Limited time to consolidate skills and undertake supplementary reading (hence the need for an excellent mentor who could answer questions and help to reduce time researching relevant information).
- Time pressures to perform the new physical assessment skills when patient appointments were set at 10 minute intervals (adapting the detailed skills taught in the classroom to realities of time demands in practice).
- Fulfilling the role to the best of abilities (for self and patients) whilst addressing Trust targets and meeting managerial expectations.
- The lack of an integrated computer system between GP surgeries and the community nursing teams delaying access to information and patient notes to help refine assessment on arrival (Alumna 6).
- Lack of prior experience with the client group and assessment techniques (Stakeholder 4).
- Lack of time to provide direct management support to the clinicians taking on the role (Stakeholder 1 Manager).
- Expanding case loads
- Increasing paperwork (rapid assessment and documentation on the computer) seen to duplicate effort (Alumna 1).

One strategy for managing the increasing work load could be to adopt the system of 'Virtual Wards'. In this system patients could be classified either as daily, weekly or monthly patients. Each day a certain number of those patients could be seen for example: 5 daily patients, 10-15 weekly patients could be seen or contacted, and finally, the monthly patients could be seen at a rate of six a day or 10 a week (Alumna 1). Priority for visits would be given to anyone who might breach the readmission target.

“[The virtual ward] have community matrons’ caseloads of 100, they’re very complex ones, they go and assess them. But in their team they have admin, doctors, physios, OTs, staff nurses, Tom, Dick, and Harry basically, who all are in this room or whatever and the virtual ward is up there on the board with the patients names on and they have a meeting every morning to discuss certain patients. They’ll discuss the whole lot for the day, and I’ve also got a feeling they move them around, sort of breast screening and whatever. There are so many in red, so if you’ve got an extra one in red, then you fill out two of the green spaces. It’s a lovely dream, but how they managed to get the funding for it in the first place I don’t know. (Stakeholder 1 Manager).

Unbounded practice did create some anxiety for the practitioners in new roles especially where they had an explicit substitution role for the GP.

“Once you have done working at a different level you are actually coming out of the nursing side and you are more medical. Where do you draw the line? You learn more and you are definitely going down the medical route and then where is your boundary? Where do you stop? I am quite unsure where my boundaries are a lot of the time. I just go with what I am comfortable.” (Alumna 7).

However alumna 2 identified that:

“It’s very satisfying that you can see a difference. Now some patients are just so ill that you can’t keep them out of hospital. But there are times when the hospital is the best place.” (Alumna 2).

But one stakeholder felt the significant contribution made by the practitioners in new roles was the:

“...ability to manage patients with chronic disease in their own homes for as long as possible, plus doing more end of life care rather than patients hitting crisis and ending up in A&E and dying in hospital (Stakeholder 4).

To summarise benefits of learning physical assessment skills

- Learning physical assessment skills meant time spent time with the patients was: focused and ensured comprehensive review of medications as part of history taking as well as the care package on offer.
- Liaison with the wards and across primary care teams and services were enhanced by using correct terminology to trigger a timely response to a referral
- Enhancement of skills in use, extension and refinement of existing skills
- Structured consultations
- Communicating with medical professionals using appropriate language and terminology
- Enhanced collegiate relationships and mutual respect

4.7.1 Outcomes for the organisation

The impact of the skills for the organisation could be summarised as:

- Comprehensive assessment that informs extended prescribing (Stakeholder 1 Manager).
- Meeting targets
- Collating evidence that is submitted monthly to demonstrate that they have averted hospital admissions

“they gave us a target of one and a half admissions for a patient on our case load ... as the case loads have grown, they have multiplied that up so that by the end of March the figure we were allowed to have was 198 admissions across the six of us cumulative over the last year, and we'd actually only had 80 and we saved the Trust something like £196,000 because of it.” (Alumna 1).

- Timely admissions and early discharges

“Sometimes they go in to hospital and come out with a whole load of things sorted. ... Even when they go in, by liaising we can get them out a bit earlier than they would have done...” (Alumna 2).

“you’ve got to recognise that there are times when acute medicine is required and I do think you have to be careful with patients we’re seeing because I think you could easily walk a real fine line as to whether they should be at home or in hospital, and I don’t think you should be frightened about saying ‘well actually no, this person has to go in’, and the patients trust you and the GPs then trust you and then they’re able to act very quickly, I can get them into hospital straightaway without having to do a 999, I can get one of the x ambulances...” (Alumna 6).

However, at the focus group one senior manager declared that any admission was a failing on behalf of the nurses; interventions should have been set in place with adequate patient education to prevent an exacerbation leading to hospital admission (Focus Group, September, 2007). This demonstrates an adherence to meeting targets which take no account of physiological instability, social circumstance or exposure to viral or bacterial infections. Nor does it take into account the way in which the Community Matrons’ tailored their practice with the ultimate goal of acquiring compliance, which they understood took time, patience and effort to change many years of patient’s managing their own conditions:

“...we use the NICE guidelines but it’s no good saying to this patient ‘oh you mustn’t have a nebuliser! The fact that I could get somebody using it twice a day instead of four times a day is a success. At the end of the day [the manager]’s not there living with the disease – they are, and if they can live with it to a good standard then that’s the most important thing. ... Mr X is elderly with severe COPD, who has managed his own disease for years, you can’t take that away from them and say ‘well you must do this that and the other’. I like to get to know the person, sort out

anything that obviously is acutely wrong or they're acutely unwell, I want to know about their family, I want to know about what's going on in their life and get that relationship going. I found that works really well because then they trust you." (Alumna 6).

- Increasing autonomy and working more independently.

Undertaking emergency appointment consultations in a GP surgery expressly substituting for the doctors was undertaken by two Nurse Practitioners. One practitioner had been put in post to replace a GP who had retired. Practicing this autonomously left little or no time for continuing mentorship and support. One alumna described her concern:

"I am making a lot of decisions, seeing a lot of people a day and doing a lot of prescribing for them. It was a very steep learning curve. That side of it was very medical." (Alumna 7).

However, in this practice they had adopted an approach whereby alternating visits ensured some cross over and cross referencing of the assessments.

"I do their rounds for all the nursing homes in the area...[the client group] is mostly elderly. About 350 to 400 people in the care homes. And the other way I use my skills is if someone phones in for a home visit from the doctor, the receptionist will triage the call to me and I will go and do a lot of the home visits. [the patients in the care homes] are still under the GPs. Depending on what home it is we have a rota, he'll do the rounds in that particular care home one week and I'll do it the next. We share it out between us." (Alumna 7).

In addition such an approach could establish a new service provided by a specialist practitioner:

"...if we are going down the route of promoting the skills to the GPs as being more for triage visits, there need to be some criteria or boundaries. There could be one designated DN for the bigger area and a GP could ring and say 'Could do with a visit. Could you go and see them?' And that could be seen as a business." (Alumna 3).

However the theme of being able to follow through on the assessments with appropriate intervention or prescription was raised again:

"I do use physical assessment on most visits, so that's very useful, I teach a lot, other health professional come out with me about twice a week, patient education, health promotion, pharmacology knowledge is paramount. To be a prescriber would help, because currently I decide what I think should happen....but I then have to suggest to a GP that that is what I think should happen. So to be a prescriber would be a help." (Alumna 8).

"I visited one chap in his 40s who had bowel cancer and he was having chemotherapy and he had asthma and he was complaining of pain in his chest. I got him to go straight to the GP. And the GP said 'why didn't you examine his chest?' And I thought 'Yes, I should have done'. The GP happened to be my mentor. And I thought 'why didn't I?' Perhaps because I had doing a lot of other things at the time, but I should have done. Unless you keep using the skills, you begin to doubt what you are hearing." (Alumna 4).

In summary, the nurses were clear that they needed to use the skills to maintain them, but they were also concerned in clear delegated or substitution roles that they would not be expected to provide a service without appropriate back up or medical consultation. In practice most practitioners did have excellent working relations with their medical colleagues and in knowing the teams concerned, ensured that personal and professional credibility would ensure a request was followed up. Concern was expressed about the extent to which this could be rolled out to a wider community of practitioners when these existing relationships were absent.

4.8 The link between Prescribing and Physical Assessment

Following through on assessments was considered critical. Therefore, Community Matrons felt that the physical assessment module and the prescribing course were essential to realise the full potential of the role, especially where they were acting in pure delegation or substitution roles. Where the alumnae had only physical assessment they felt that this increased the number of referrals to their medical colleagues to act upon their findings.

Within the current course design for the MSc Advanced Practice degree it would be possible for a student to gain sufficient M level credits for the MSc without doing the prescribing module. One of the community matron managers thought this should be a core module in future. She referred to one of her staff who has gained sufficient credits at M level and was doing the prescribing module as an 'extra module'. And she was clear that the "physical assessment module is not the complete package." (Stakeholder 1 Manager).

When asked which module should be undertaken first, physical assessment or prescribing, one alumna who took the physical assessment module before proceeding to prescribing replied,

"The large part of the prescribing course is based on the assessment and diagnosis so unless you've done the physical assessment too I think you're going to find that quite difficult." (Alumna 1).

In contrast alumnae stated that she did not want to undertake the prescribing module. She felt that the limited formulary she could use as a District Nurse and existing referral systems meant this was an unnecessary venture, especially as she felt the course was too short to provide the adequate knowledge to do this:

"I obviously prescribe, as a district nurse from a limited formulary... I haven't come across any problem with medication, if there's an issue or a query about what a person's got I can always phone through and speak to the GPs. I can send practice notes on the computer. I can ring straight through to prescriptions and at the end of the day I don't actually want to take on that responsibility. I don't feel I have the knowledge and I don't think doing the 6 month course is suddenly going to give me that knowledge (Alumna 6).

4.9 Support for new roles: organisational issues

Support from peers on the programme, GPs and DN colleagues were identified as critical support to enable the practitioners to foster the challenges of their new role. Regular meetings held at the Strategic Health Authority and with the Transforming Chronic Care Programme Team were also highlighted by the alumnae as extremely helpful in anchoring disparate ambitions as to how the roles might be put to use. Co-ordination by the SHA helped the Community Matrons to focus on how their role fitted into the overall health care agenda and modernising strategy in the locality. Disseminating information to colleagues throughout the Trust was also felt critical to enable others to understand their role and as a consequence, make appropriate referrals. These inputs were seen to enable the alumnae to achieve their targets. Other facilitative factors cited by the alumnae included:

- A supportive team environment
- The provision of suitable office space and consultation rooms
- Advanced assessment skills and prescribing skills acquired together rather than experiencing incremental delays.

And finally, as the role started to become established and their workload increased, the alumnae could see the need for support roles to assist the Community matrons.

4.10 Considering roll out to the wider community of nurses

When considering roll out, many of the nurses felt it would have wide use – but it was essential that those skills were used regularly and directly benefited patients. This was felt essential to cope with the changing client group in the caseload and increasing patient dependency. However, professional experience of working with clients who had complex chronic conditions were thought to be crucial to maximise the way in which the skills could be used. A community matron discussed unsuitable candidates for the physical assessment module as those

"...who aren't prepared to act on their findings or question their findings. I suppose its no different than taking a blood pressure and questioning whether it was a high blood pressure or going back and repeating it, or say if you've taken bloods and there's a anomaly in your blood result, those bloods need repeating or acting on, you know, so its that thing again you're measuring something but what are you going to do with that measurement, its no different than listening to a

chest, what are you going to do after you've listened to the chest, is something wrong, do they need to be referred." (Stakeholder 4).

"I think that the physical assessment course is only suitable for specialist practitioners (DNs). Or I suppose you could also bring into that staff nurses who are managing a case load but haven't got the specialist practitioner qualification. It's a bit like the nurse prescribing I suppose, if the job needs these skills and knowledge, then it should be available. But in this day and age, you can't really do courses for courses sake. If a district nurse is doing it to underpin her practice and so it is a best fit for X Trust ...cascading out and helping to keep people out of hospital - you are saving money that way." (Alumna 3).

"Well I think it depends so much on the individual really and how much experience they've got and how confident they are, but I think definitely you wouldn't want anybody who was uncertain about whether they were right...Or you'd just end up in a more difficult situation than you were in." (Stakeholder 3 GP).

However, a senior manager took a different view as to who should be able to undertake the physical assessment module and this was about succession planning rather than any personal requisite of the postholder:

"...the Staff Nurses who work with the District Nurses' team are definitely going to have to be doing it because they're going to want some sort of development role in the company and that's going to be one of the things that is going to develop them. We haven't sent anybody off to the District Nursing Course this year it wasn't because we didn't want to, we did have a place but nobody took it on. I think the Staff Nurses, a lot of them are coming straight from training into the community. So we're well aware that we need lots of support for them, physical assessment skills is going to be one of the modules I can see them doing. .. But we need them ... as the Community Matron retires or leaves, we want people who are already halfway there going for these jobs. That's why Staff Nurses are needed to do physical assessments." (Stakeholder 1 Manager).

When asked if systematic physical assessment skills should be included in pre-registration training a community matron manager commented that newly qualified nurses often lacked confidence and were reluctant to make decisions when working on their own.

"We'd like a newly qualified nurse to come out with basic skills, doing injections, taking blood pressures, maybe taking bloods and things. We're having a lot of problems. They just haven't got the confidence to be working out there on their own, and some of them just never get it. I

do feel that you either are a Community Nurse or you're not. Some of them just cannot make decisions. I don't know how we get out of it but I have heard that basic skills are lacking." (Stakeholder 1 Manager).

4.11 Patient perspectives on new roles.

Patients were satisfied with the service provided by the Community Matrons and Nurse Practitioners. Differentiating what they did that was different to other nurses was harder for patients to describe so in general they tended to provide plaudits about their overall experience of the service. However, one alumna felt that what she did was noticeable to the patients and described it as:

"The average DN doesn't start listening to chests and hearts, pulling you around to do things, so they obviously notice the difference there. I think they probably realise we work slightly differently. ... they can see that there is a difference because we're always getting on to different people, contacting them." (Alumna 1).

When asked of the role of the Community Matron one patient summarised it as:

"Caring for anyone who comes under the general heading of care in the community I suppose. A liaison between them and the GP and the pharmacy and generally to monitor the progress." (Patient 8).

Patient 1 reflected on his care and compared the community matron's assessments to those of his GP. The patient had been referred to the GP when she detected a bradycardia associated with breathlessness.

"...well they're finding out everything, and doing everything that's needed. I think I've had good treatment from everyone. [the community matron's assessments] is the same as the doctor's." (Patient 1).

The notion of understanding a more holistic role was picked up when comparing a Community Matron with the nurses:

"...I think it is very useful when you're on your own to have that contact [Community Matron] with somebody and somebody who can tell you if that is a problem I need to sort out or no...she seems to be able to do it all, the pills, the chest examinations, everything. [when asked if she needed to see her GP] I haven't seen him [GP] for quite a while. ...There's nobody else that comes to see me only X [community matron], the nurses don't do what X does, they just do the IVs and that. She does the whole thing" (Patient 9).

Another elderly lady with COPD explained

"Well I understand that if I don't feel well I can get in touch with X (Alumna 6), X's left her numbers and everything for me, I'm more than

grateful that she comes out to me because you get a bit nervous with this, so for someone to come out and just say 'yes, you're a bit chesty' or whatever, it just calms you down, but they are very good. ...Well before, any problems we used to call 999, and I used to go into A&E and if I was admitted to hospital when I came out and COPD nurses used to come out and they can't do really as much as what X (Community Matron) could, they couldn't get my prescriptions and things like this. Its very good, I don't know what I'd do without her." (Patient 10).

However, many of the patients perceived the practitioners undertaking physical assessment to be doing this on behalf of the doctors. However, they provided more and this was highly valued by the patients and their relatives. An elderly lady with COPD who in the past had many hospital admissions described the community matron role as follows,

"I don't know if I've got it right it's just it takes a bit of pressure off the doctor. I mean I'm satisfied with it, she's easy to get hold of and talk to, she brings the medicine, and all that and it takes the worry off me because if you do feel ill you wait such a long time for a doctor... if you feel queer she's easy to get and she'll come in when you ask her ...she always examines my chest, and checks my oxygen, and whatever else needs done. I feel as if I'm being looked after. I don't have to sit and worry about anything now. I know that as I say, I've got (Name of CM)'s phone number. You know, she's good." (Patient 2).

"...Well, in x I've got somebody I can rely on to see me on a regular basis and who has the knowledge to answer any questions I've got and to take any action that is necessary to get things through to the GP." (Patient 8).

The notion of confidence in the practitioners gave patients peace of mind and helped them to adapt to general deterioration associated with their chronic conditions. This elderly lady with advanced Parkinson's Disease and Osteoporosis summarised the community matron interventions to address both her physical problems but also her emotional wellbeing,

"she's an intermediary and reduces the load a bit on the doctor".
Today there was occasion to find where the pain was. ...she is there to answer questions... it seems what's wrong is a permanent state and (referral to hospital for x-ray) verified that. She's very goodit's a question of caring for the spirit as much as the physical" (Patient 3).

Another patient who clearly identified what the primary purpose of the specialist visiting him at home was to achieve:

“they don’t want me in hospital! To be honest with you it’s a good idea, I’m not joking. Since she’s come your mind is at ease.... She’s very good (referring to Alumna 8). “Oh yes I used to worry about my [condition]. She’s been brilliant. It’s been a great thing. I have a lot of water on the legs, and she’s trying to get it off and she gives advice if I have to take a new tablet, and we take it from there. It (new tablet) works or it doesn’t work. If I get a pain in my kidneys she said ‘stop it’. She’s first class, but don’t tell her I told you! This was a typical one today but with the blood tests to check the tablets, and we’ll take it from there” (Patient 11).

The idea of the practitioners acting in substitution roles for the doctors was a theme picked up by this patient’s wife. However, they also could see the value added in receiving care from the Community Matron:

“...we haven’t had to call on her (Community Matron), she’s called on us, the doctor sent her. She’s a bit of support for us you know with old age problems and we don’t have to think well we have to go for a doctor’s appointment. She’s like a buffer between us and the doctors, but I mean a useful buffer because she could probably help us with minor things. ...I mean we have many medications sent by the chemist and we appreciate that. We appreciate not having to walk round – it’s not far, but it is when you can’t walk without a stick and he can’t walk without stopping every few minutes to get his breath. ...I think (name of CM) is more thorough. She spends more time, she’s more caring you know. They don’t have time they’ve got to see others at the surgery. You can’t expect too much of the doctors time. We have no criticisms of our doctors round there because we always think, always consider that we’ve had good care from our doctors.” (Relative 2, wife of patient 4).

A relative referred to the thorough respiratory examinations that the community matron had done for her husband.

“Yes, she’s checked him now, she’s given him two checks today. She surprised me because she gave him a better check than I’ve seen him have for a long time and I thought to myself she’s given him a jolly good going over.” Relative 2.

Patient 4 described how he was satisfied with his medical progress since the community matron had started to visit him,

“Yes I’m happy with it, it’s for my own benefit and I’ve noticed the improvement, I have got better lately haven’t I (looks to wife)?” Patient 4.

A district nurse described patients’ reactions to her practising physical assessment skills on them.

“They (patients) were really very good, even when they were quite ill, I think that they liked the extra interest that was being shown. I didn’t have anyone who refused”...I always seek consent but I think that it is almost expected now and they don’t see it as extraordinary out of our normal role.” (Alumna 4).

However, the type of interventions provided by the specialist nurses and Community matrons did take time, especially when visiting a patient with a complex set of needs. Initial visits often threw up unmet need that required that required referral into other services:

“I’ve only actually met him about three or four times. The first and second time I was there about a couple of hours and did manage to get other people involved because the environment physically and socially needed a lot of input. I think he’s gained benefit from that input as well” (Alumna 8).

The type of complexity that the specialist nurse was managing

“This gentleman is more complex because he has co-morbidities and at present is being investigated for abdominal problems and also a mental health problem which makes history taking sometimes difficult. You do have to be led as with all patients, but particularly with him, by how he wants to give information. But physically I was again quite pleased from a heart failure perspective with his physical assessment in that his heart rate was within normal limits, his oedema levels were minimal, he didn’t have any pulmonary oedema. He had lost weight. That may also be due to the abdominal problems. So that I could increase his beta blocker medication which would improve his condition from a heart failure perspective having said that listening to him, that’s not his priority. So I had to be led by his priorities which were the fact that he needs to know the results of the ultrasound scan that he’s had done last week and also his anxiety generally which I don’t I’m not involved with his treatment regarding anxiety and depression but I think he gets benefit from being listened to. So I left that visit feeling positive that he’d been listened to and he had remained stable from the heart failure perspective. From the heart failure point of view he’ll need the protection of beta-blockers.” (Alumna 8).

In summary patients valued:

- Accessibility
- Convenience of the service (home visits)
- Continuity in relationship with the practitioner (preventing assessment by locums),
- Regular visits – close monitoring from the patient’s baseline
- More detailed assessment and more time spent on the consultation
- Liaison between the surgery and pharmacy and patients
- Helping patients and relatives manage the polypharmacy

- Confidence to stay in their home and be assured of a visit (anxiety management)
- Reduction in the number of 999 calls and visits to A/E
- Direct self referral / contact for relatives and patients (by-passing GP receptionist and appointment systems).
- Link to the outside world – bridge to get help, feeling valued and cared for because of the continuity of contact with their practitioner

A range of the type of interventions observed by the alumnae is set out in the table below

Table 4.2: Summaries of Observations of Patient Consultations

Patient Stakeholders	Alumnae	Purpose of consultation	Skills used	Outcome of consultation
Patient 1	Alumna 1 Community Matron	Review CHF	Consultation skills, systematic history taken	Summarised treatment plans. CM to check on hospital referral.
Patient 2	Alumna 2 Community Matron	Review COPD	Consultation skills, systematic history & respiratory examination	Chest clear. Emergency antibiotics delivered.
Patient 3	Alumna 2	Review Parkinsons' Disease, Osteoporosis, Abdominal Pain	Consultation skills, systematic history, abdominal & musculoskeletal examination.	Abdominal discomfort persists. Analgesia and Parkinsons' medication delivered.
Patient 4	Alumna 2	Review COPD	Consultation skills, systematic history & respiratory examination	Chest clear. Advised wife re- attendance allowance contact person.
Patient 5	Alumna 5 Nurse Practitioner GP Surgery	Emergency GP Appt. Red eye	Consultation skills, systematic history & external eyes examined.	Sub conjunctival haemorrhage. Red Flag Signs discussed. Blood cholesterol, sugars to be checked. To attend for mini medical exam.
Patient 6	Alumna 5	Emergency GP Appt. Discharge from eye	Consultation skills, systematic history & external eyes examined- fluorescein drops used.	Conjunctivitis. Checked allergies. Advised re Antibiotic eye drops/ ointment application. No contact lenses for 2 weeks. Red Flag signs discussed.
Patient 7	Alumna 5	Emergency GP Appt. Sore wrist and thumb- 2	Consultation skills, systematic history & upper limb	Sprained wrist and thumb. Advised rest, elevation, ice packs and analgesia.

		day since injury.	musculoskeletal examination.	Red Flag Signs discussed.
Patient 8	Alumna 6 Community Matron/ DN	Review COPD	Consultation skills, systematic history & respiratory examination.	Chest improved, Adjusted medication. Complaining of painful hip, advised regular analgesia. Review in 2 weeks.
Patient 9	Alumna 6	Review COPD post hospitalisation	Consultation skills, systematic history & respiratory examination. Aural examination performed as c/o sore ears.	Chest improving, fewer crackles. Ears- Nil wax- to inform DNs if problem persists. Continues on intravenous antibiotics. Review after Consultant's Hosp. Appointment.
Patient 10	Alumna 6	Review COPD	Consultation skills, systematic history & respiratory examination	Breathlessness improved during visit. CM stated that patient's chest was 'tight' rather than the start of an infection. Reviewed medications and advised which nebulisers to take to relieve symptoms. Colleague to phone patient next day to check on her progress.
Patient 11	Alumna 8 Specialist Nurse	Review Heart Failure	Consultation skills, systematic history & cardiac/ respiratory examination	Cardiac failure, decompensated over past 2 weeks, had three changes to diuretic medications. Not dehydrated, no pulmonary oedema, less peripheral oedema, (lost 9 Kg weight, improved quality of life. Review 1 week.
Patient 12	Alumna 8	Review Heart Failure	Consultation skills, systematic history & cardiac/ respiratory examination	Cardiac failure status unchanged. Advised patient would check up on the results of a recent abdominal ultrasound scan. To return with Scan results.
Patient 13	Alumna 8	Review	Consultation	Cardiac failure status

		Heart Failure	skills, systematic history & cardiac/ respiratory examination.	unchanged. Advised re results of recent Echo- slightly enlarged ventricle. Reported increased tiredness- Bloods taken for thyroid and renal function. Advised re- increasing betablocker, will contact GP. Review in one month- will check oxygen saturations then.
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4.12 GPs' views on the contribution of nurses in new roles.

Initially, the GPs were slow to refer patients into the service. However, this had been addressed by regular presentations to them making explicit the value of the role and how they might be used effectively. This had resulted in an up-turn in referrals and in some instances this was perceived to start to overload the practitioners (Stakeholder 1 Manager). However, it was evident, that where the practitioners were known to the GPs, they were more likely to make a referral (Alumna 7).

One of the GPs described the value she placed in the community matrons, primarily because she did a more holistic job (the key issue picked up by patients and their relatives as well), that echoed how District Nursing had been in the past:

"...[the physical assessment module] seems to have prepared her very well. I mean, she does an excellent job...it makes life a lot easier because you know there's somebody there who is reliable, responsible and interested. So she fills a number of gaps in the community service that have opened up because the District Nurses' service has shrunk...what they've tried to do is replace staff with the minimum possible qualifications rather than the maximum possible, in order to save money, pay people on lower grades. So they'll do a specific job but they won't look at problems in the kind of wider context always because they don't have time. She'll (Community Matron) look at problems in more depth and in greater width and she'll liaise with hospital Outpatient Clinics and Social Services, arrange transport, also hands-on care....She'll fill in the gap." (Stakeholder 3, GP).

The extent to which complete substitution was considered viable by the GPs was viewed with some caution. What was valued was the way in which the roles complemented the team's function:

"...if we put her on a nurse prescriber course then she'd be a lot more independent, but then she'd be kind of being a GP in her own right... a job overlap. What she could do and what I do aren't hugely different, although she'll provide the nursing end of the assessment. So she provides a different angle on the problem and provides different

solutions to it. I mean, she can provide a solution herself, if she goes to see somebody who's going to have a cataract operation, who can't put drops in themselves she says 'right, I'll organize it and I'll do it' whereas I have to ask somebody else to do it." (Stakeholder 3, GP).

In summary GPs valued the role and the physical assessment training because:

- Refined assessment skills and diagnostic ability.
- Extended confidence, range of abilities and contribution within the team
- Enhanced professional and personal esteem that affected moral
- Ability to use practice independently
- Support to the GP – sharing of the workload
- Concurrent surgeries enabled referral consultations without moving the patient
- Introduces problems which means subsequent assessment by the doctor is more focused and refined.

Given these positive evaluations of the impact on the alumnae practitioners, those interviewed were asked how far access to this module should be rolled out among other community nurses. The response was:

"Everybody who sees patients--but taken to a level that is safe, appropriate and comfortable according to the individuals' skills, confidence and attitude". (Stakeholder 5 GP).

However, the GPs interviewed highlighted some risks in this strategy and these included:

- Role overlap
- Lack of clarity of the role and function and when to make appropriate referrals that was understood by the whole team.
- Prescribing for patients with complex problems especially where the GP felt it was important to maintain links with the patient to monitor progress
- Concern for the security of funding to sustain the role

"... I think the GPs were a little bit suspicious at first. There were lots of comments "is this just another one of these government things and they will run out of money and it will all go belly up". (Alumna 2)

On the issue of quality assurance, one of the community matron managers discussed the need to monitor practice following the physical assessment module to ensure that practitioners were maintaining satisfactory standards. She thought practice could be evaluated annually and that a GP might be a suitable person to undertake that role.

"If you've just been doing it for ten years with nobody checking that you're doing it right, I mean alright you keep up to date and everything, but there's just something about that accountability business and are you still doing it right? Have you got into a bad habit that you haven't realized? Have you missed something? ... I just feel that a GP could do that. A GP could do

that once a year... because in fact a GP would probably be a better person than the University. Maybe it's a case of employing a GP, (name of organisation) employing somebody." (Stakeholder 1 Manager).

4.13 Summary Points

- The practitioners in the community felt they would be unable to do their jobs without the physical assessment skills.
- They felt that they had gained more structure to their assessment as a consequence of doing the module which also helped them communicate more effectively and make referrals to their colleagues.
- Additional skills of examination enabled a more thorough overall assessment
- The nurses felt that physical assessment skills were critical to enable them to make diagnoses and prescribe effectively.
- The nurses had collected data to demonstrate their impact on Trust targets.
- Identifying unmet need and new problems added to their workload.
- Practitioners working in highly autonomous roles felt they needed further support or evaluation of their performance after completing the course.
- Changes within the Trust and job insecurity made learning on the programme an additional stressor and challenge.
- To enable new roles to enact policy initiatives had to be translated to local situation and the support of the SHA and the Trust was considered critical to help practitioners make successful transitions into their new roles.
- Practitioners used a wide range of assessment skills in the community but respiratory and cardiovascular and abdominal assessment were the most frequently used physical assessment techniques.
- Patients and their relatives highly valued the input of the practitioners and were confident in their expertise and advice.
- The community practitioners did not see any risk in their roles becoming medicalised but were optimistic they enabled them to expand their practice in a way that corresponded with new service delivery.

5 Implementing physical assessment skills in practice

5.1 Introduction

This chapter explores the key findings from the four cases and draws out the common as well as idiosyncratic issues that affect the implementation of newly learnt physical assessment skills into practice. It starts with an exploration of the ways in which the learning from the module impacted on the practitioners' practice. It then turns to examine the way in which policy drivers are transmitted into organisations to influence the context into which practitioners work and the uptake of these skills. Finally, the chapter turns to examine the way in which patients and their relatives evaluated the services provided by alumnae who exercised their advanced physical assessment skills in practice.

5.2 The impact of physical assessment module on the practice of the alumnae

The module did equip the alumnae with skills that they felt enabled them to formulate clinical decisions and or differential diagnoses. This was considered imperative where they assumed roles that required them to function with greater autonomy or where they were expected to order further investigations or prescribe care or medication. Prescribing medication may have been independent when a prescribing programme had been completed or where patient group directives were in place within the Trust. However, the module was not designed as a stand alone to enable practitioners to prescribe but was designed to act as foundational to additional modules that specifically addressed core competencies for prescribing. However, the module did make alumnae more aware of a range of investigations that might be required to formulate clinical decision and or differential diagnoses. The degree to which the local trusts granted permission to the alumnae to order relevant investigations or take independent action did affect the degree to which the newly acquired skills were put to use. Without independence to take subsequent action the alumnae considered advanced physical assessment to have little relevance to their practice especially if the assessment was repeated by the medical staff and or might cause the patient undue discomfort in having the assessment repeated.

The alumnae felt that the module provided them with a structure with which to assess a patient and that structure enhanced the way in which they communicated findings to their medical colleagues. However, professional maturity and confidence in the alumnae's assessment findings did affect the way in which findings were shared. Appropriate use of medical language as well as substantiation of those findings with biochemical results, was affected by the confidence of the alumnae in their knowledge base. As a consequence, most alumnae found that they used the physical assessment techniques for a few systems most relevant to their area of specialist practice. By virtue of their area of speciality, they had inevitably acquired a more advanced body of knowledge before the undertook the module and the learning on the module served to consolidate existing theoretical understanding whilst learning new skills and physical assessment techniques. The most commonly used physical assessment skills focussed on respiratory, cardio vascular and abdominal assessment. Neurological assessment was used predominantly by specialists in the area but others put some of the neurological assessment techniques to limited use. The

exception to this was night nurse practitioners who felt they needed the whole range of skills as they might be called to assess patients with a range of problems. Importantly alumnae all agreed that unless the techniques were put to regular use they rapidly experienced skill fade. Many of the alumnae welcomed the opportunity to have recall sessions or updates to review and maintain their skills and knowledge. The greatest emphasis for this came from night nurse practitioners.

Learning the skills was considered to be challenging but rewarding by the alumnae. They highly valued the clinical relevance of the subjects addressed and the opportunity to rehearse techniques in a skills laboratory under the supervision of practice facilitators and lecturers. A critical component of the learning came through the application of techniques in practice, supported and supervised by mentors. In many instances mentors were medical colleagues, although some nurses who had undertaken the programme also acted as mentors. The hope that ultimately all the mentors would be alumnae of the module was hard to realise because:

- a) alumnae initially lacked confidence to do this;
- b) many were in specialist roles and felt they were not confident to demonstrate techniques, supervise or assess students undertaking the assessment of systems they had not regularly put to use themselves;
- c) they might have worked in environments that did not readily accessible to students on the module.

Access to mentors was variable and many students found they had to make special out of hours arrangements to undertake new learning or assessment of performance. In some instances, mentors and students practised the techniques on one another that enabled the assessment of normal function (although rarely, some abnormal findings were detected on colleagues), but this did not necessarily build confidence in assessing sick patients. Medical staff acting as mentors, were more likely to advocate assessment of patients and encourage the students to use a fuller range of their skills and techniques. All mentors encouraged their students and assured them that practice was important to develop and enhance dexterity in the use of techniques but also build confidence to assert the implications of the assessment findings.

The module was resource intensive and students did need time to rehearse and consolidate their learning in skills laboratories as well as supervised in practice. Assurance over competence was sort by the students who welcomed assessment in simulated as well as live conditions. This again demanded intensive work with mentors, and where in post, practice placement facilitators. The practice placement facilitators' role in building student confidence was universally applauded and there was serious concern when these posts were lost to the organisations expressed by students and lecturers. However, medical staff considered there to be no substitute for the assurance of competence they made by assessing an individual's performance. Therefore it might be that the practice facilitator has an important role in teaching, demonstrating and then undertaking formative assessment of performance but medical colleagues might assume the role of summative assessor especially in environments where there is some doubt over nurses' ability to undertake physical assessment.

5.3 From policy to practice

New roles and new ways of working are now synonymous with the Department of Health's policy and strategic direction to meet the modernising agenda. The reduction of hours worked by doctors in training in response to the European Working Time Directive, has meant that many of the new roles and new ways of have been created to provide out of hours and non scheduled care services. The drive towards caring for the chronically ill in the community similarly created opportunities for new roles to emerge. Physical assessment leading to a differentiated diagnosis or recognition of abnormality and case load management became core skills to facilitate practitioners assuming such roles. In response to this demand the Universities established a physical assessment module provided through a combination of taught and work based learning methods.

Although open to all health care workers, the module was predominantly populated by nurses. Two students on the emergency care practitioner (ECP) programme also went through the module, but were unable to use their skills in practice as the ECP role had not been commissioned within their employing Ambulance Trust at the time they had completed the module. Likewise, nurses from one acute trust were unable to apply their skills back in practice because there were no overt signals of permission provided by the Trust to allow for these specific skills to be put to use.

This illustrates a key issue that although Trusts might subscribe to the new policies and be prepared to up-skill their staff, especially where programmes were provided by the local SHA, without a role into which the practitioners could step, the skills could not be applied. Without regular use of the skills, they rapidly became redundant and were lost to the individual practitioner and the organisation. Factors that caused the extinction of the roles will now be analysed.

First, where a practitioner was in an autonomous or specialist role, there was more chance that they would be able to incorporate the newly acquired physical assessment techniques and skills to their practice. In part this was because of the nature of their role, which enabled them to practice with reduced risk of interference (from colleagues, managers or medical staff) but also by virtue of the fact that they had 'organisational permission' to access patients and practice in this way. Thus working in a nurse led clinic or acting as a specialist consulted by colleagues, situated the nurse in a relatively powerful position of 'otherness'. Their power emanated from the authority of their knowledge that was organisationally sanctioned and legitimated by their title/ appointment and the geographical space in which they worked. Where alumnae assumed roles that were occupied by others who had not undergone the same training, exercising their physical assessment skills became a bit more problematic and required delicate negotiation. Proximity to their colleagues (nursing and medical), resulted in closer scrutiny by them and these alumnae found themselves challenged at many levels. At a personal level, their motivation to assume this role in the first instance was held up for scrutiny, generating concerns of selfish aggrandisement rather than functioning to provide new and necessary services. At a professional level, they were challenged as to how they had acquired the necessary knowledge base during the module to act in a substitution role for the doctor. In one particular Trust, nursing did not command high respect from management nor the medical teams. Spoiled identities associated with high profile cases that resulted in blame

being cast on negligent nursing care, resulted in both management and medical staff asserting that nurses needed to 'get their house in order' before taking on additional or advanced roles. Furthermore, to achieve this, that talented practitioners should remain in traditional posts to act as positive role models and enhance the skills of their nursing colleagues rather than drift away from essential and core nursing activities.

A lack of faith in the capabilities of the nurses, uncharacteristically stifled the development of guidelines and protocols to manage expansion of their practice¹⁶. Entrenched views about the limitations of what nurses might be able to achieve further inhibited opportunities to create new roles occupied by nurses. Without clear nursing leadership to create opportunities in which to change fixed and potentially negative views, or set a clear strategic direction in which to situate planning for role development, stasis was achieved. Furthermore, this served to compound the low professional esteem among the nursing workforce and some nurses' doubt over the merit in undertaking new roles or doubt in those who did. To add to the cultural gloom, this Trust was placed under the Turnaround team to redress its 'failing' status (in this case both financial and loss of public confidence). Under the turnaround team's direction, the focus of development activity was to make financial savings and address a number of basic quality issues. The combination of these factors drove this Trust to be cautious about using nurses in new roles, notably substitution roles for the doctors, and attention was cast to making savings elsewhere.

This contrasted with the other acute trust where they invested heavily in new roles as a way to make cost savings. Here, substitution roles were put forward and supported (and in part controlled) through the use of guidelines and protocols. Although this Trust was also in turnaround, experiencing serious financial difficulties and negative media attention, the variable here was greater confidence in their senior and specialist nurses (in part because of successful and high profile role models whose professionalism and competence acted to confirm what could be achieved), strong nursing leadership advocating the potential of nursing, and pre existing strategic commitment to developments made prior to the turnaround status. This resulted in the Trust remaining committed to existing new roles (outreach services, night nurse practitioners, advanced nurse practitioners, consultant and specialist nurses along with a circumspect view on the expansion of nurse prescribing) but exercising caution as to where new services and new roles might emerge until the Trusts' overall position as a provider had been confirmed by central government. At the time of data collection, the Trust was in consultation with the public about the reconfiguration of services in the locality which led to delay and uncertainty over further expansion and direction for new roles.

In the community, circumstances were once again different. Although confronted with significant reorganisation of the PCTs, which consequently left nursing leadership in constant change, and despite various cost containment initiatives, a consistent direction of travel for service development was maintained and championed under the umbrella of the chronic care programme. Here the alumnae were in the situation of having to forge a new role (e.g. Community

¹⁶ Uncharacteristic in terms of the opportunity to micro manage practice through restrictive and or limitations to practice bound into the context of the protocol.

Matron) whilst undertaking the programme, but there was support for the role from the SHA as well as the PCT. Here the alumnae experienced organisational sanction for their action, a role with a specific job title (even though the substance of the activities which made up the role were creatively constructed by the post holder), and high levels of autonomy.

Therefore, in the graph below one can see the factors which generate the highest potential for the physical assessment skills to be incorporated into a new role and the factors which result in their extinction. The x axis (organisational sanction), is made up of factors such as clear strategic direction, clear leadership for new roles, role titles, job specification, protocols and guidelines to support new activities, resources and strong collegiate support. Where these are found to be high, there is strong organisational sanction for the roles. When combined with factors such as nurse led clinics, specialist consultations, distinct roles, legitimate authority and respect that make up the y axis (degrees of autonomy), there is likely to be extensive use of the newly acquired skills especially where they are linked to ordering further investigations or prescribing care. Either side of the z axis, are situated other variables of personal as well as professional attributes of the practitioner, that affect the degree to which organisational sanction is a dependent variable on the extensive use of the skills i.e. assertive mavericks may continue to extensively use their skills even when confronted with strong organisational forces that might drive extinction of their use in less confident practitioners.

Graph 5.1: Factors leading to the extensive use of newly acquired skills.



One of the strongest features to extinguish the use of the physical assessment skills was from medical colleagues who held doubt as to whether they believed the nurses were capable of undertaking the techniques, and the extent to which they constructed this as a substitution or a delegation task (for a full discussion of

this issues please see chapter 6). Assurance in the practitioners' ability to do physical assessment skills did not come from the certificate of completion of the

programme, rather from knowing the nurse as a consequence of mentoring and or assessing, or participation in programme delivery. Confidence, or lack of it, in the general nursing workforce, leant many to caution that they sanctioned the role expansion in the nurse they knew to be competent, but might not feel so confident in the widespread roll out of such roles to others who were unknown, untried and untested according to their own criteria. Therefore, accreditation by the University, provided no assurance, even when it was known that the skills had been acquired and supported through work based learning and assessment by their colleagues. There was no substitute for quality and confidence assurance obtained by personal assessment. Here in may lie the key to changing the most entrenched and resistive medical staff, engage them in programme delivery.

The next most important factor to enabling the skills to be realised in practice were the degree to which they were integrated into or became alternative tasks in the repertoire of the practitioner. Once again this issue is picked up and expanded more fully in Chapter 6 where the notion of substitution and delegation are debated through different theoretical lenses. However, important to note here was the way in which the skills were conceptualised as an expansion of nursing practice that enhanced patient care, or were considered to be a novel sphere of practice that *replaced* existing activities. In the latter case there had to be some form of 'trade off' or decision about what part of the role was to be shed to do this. There was greater risk that the 'otherness' of the new skills, especially where the organisational sanction for them was low, were traded for tasks such as bed flow management or administrative responsibilities, especially where the organisational sanction for these activities was high. The exception to this was where practitioners assumed completely new roles that were being constructed in practice at the same time as undertaking the module, or, stepped into 'another job' that required a completely different set of competencies, role relationships and clinical activities.

A summary of all the factors that enabled the integration of physical assessment skills into the practice of nurses in new roles is outlined in Table 5.1.

5.3 From policy to patient care

Patients and their relatives universally applauded the input of the alumnae. For many, they had no template on which to make a comparison of post course performance, but spoke freely of the expertise, compassion and detailed attention they received from the alumnae. They considered the work they undertook to enhance the quality of their care, and access into services that enabled them to function independently. However, all patients and relatives stated their confidence that should they require it, a medical consultation would be facilitated by their practitioner.

Foundational to the satisfaction of patients was the continuity of service provided by the alumnae (especially when patients were in specialist or community services) and the sense of individualised care they received. They felt a trusting relationship inspired confidence to manage their chronic illness at home and the

interventions by the alumnae did reduce the need for hospitalisation. Telephone consultations, visits and recalls to clinics all helped to increase access to the

service. Patients and relatives also spoke of how the nurses identified previously unrecognised need and made referrals into relevant services which once again provided additional support to maintain greater independence.

Table 5.1: The Integration of physical assessment skills in new roles for nurses

	DOH Policy	Trust Strategy /Policy	Managerial support	Medical Support	New roles for nurses
Enabling factors	<p>Modernising Nursing Careers</p> <p>Liberating the talents</p> <p>Chief Nursing Officer's 10 key roles</p>	<p>Recognition and respect for the potential of nurses to undertake new roles</p> <p>Strategic development of new roles for nurses</p> <p>Planned strategic roll out</p> <p>Engaging directorates and teams in identification of need and ways to integrate roles into practice</p>	<p>Legitimisation of new roles through clear definition of role and function</p> <p>Systems to support legitimisation e.g. protocols and guidelines</p> <p>Interdisciplinary preparation for new roles</p>	<p>Medical support for skill development</p> <p>Medical recognition and valuing of new roles</p> <p>Delegation of medical roles to nurses with supportive back up</p> <p>Equal and trusting relationship within multi disciplinary team</p>	<p>Physical assessment skills used as part of a bundle of skills and roles e.g. alongside prescribing, ordering investigations, diagnosing</p> <p style="text-align: center;">↓</p> <p>New roles for nurses realised</p>
Extinguishing factors	<p>Financial constraints</p> <p>Targets</p>	<p>Ad hoc introduction of new roles or introduction of new roles by stealth without strategic direction and commitment</p> <p>Lack of leadership to champion potential of nursing</p> <p>Management dominated by cost containment and target requirements</p>	<p>Lack of role development for nurses</p> <p>Focus on the enhancement of traditional nursing activity to improve quality</p> <p>Pressure of existing workload and other non nursing duties to reach targets</p>	<p>Lack of understanding for new roles</p> <p>Low confidence in nursing workforce</p> <p>Reluctance to delegate</p> <p>Repetition of physical examination</p> <p>Non collegiate relationships</p>	<p>Lack of confidence resulting in physical assessment skills not being used regularly</p> <p>Nurses unable to order investigations diagnose or prescribe</p> <p style="text-align: center;">↓</p> <p>Potential of new nursing roles not realised</p>

5.4 From policy to NHS fit for the future programme

After data collection Lord Darzi's much awaited interim review report has been published (but the final report had not gone to press at the point of publishing this report). This signalled further drivers towards meeting the final third of the modernising agenda. The fit for the future programme in the local SHA complements Lord Darzi's review in that it aims to:

- Ensure best medical outcome for patients based upon up to date evidence.
- Involve clinicians in decisions affecting service innovation and development
- Provide close to home services for patients by transforming current primary and community care provision
- Fast track patients with life-threatening conditions into specialist centres
- Patient need be met by creating sustainable, affordable services
- Provide patients with greater choice and control over their care
- Provide services that are responsive to the needs of the local communities (SHA, 2008).

There has been extensive consultation with local communities over these proposed changes. Although at the start of data collection much activity focused upon redressing financial deficit, forecasts have now improved and the *Fit for the Future programme* now shifts from financial recovery to improving clinical standards (FFF Programme Office, 2007). This involves closer links between workforce planning, service innovation and delivery and educational delivery provided by the HEI sector and in the workplace.

Eight work force streams have been proposed in the locality in which these data were collected. They include:

- Maternity and child care
- Children's services
- Acute Care (subdivided into seven areas of acute care delivery: vascular, cardiac, renal, maternity, paediatric, stroke and emergency surgery services)
- Long term conditions
- Staying healthy
- Planned care
- Mental Health
- End of life care

Clinical pathway groups have been established and tasked to examine clinical evidence for each of the pathways. A set of questions has been generated to guide deliberation of each one of these groups. They are:

- What does a good care pathway look like, based on the evidence base?
- What already exists in this SHA that meets this description? Where have changes already been successfully implemented?

- What does not yet exist in this SHA to provide a good care pathway?
- What barriers exist to implementing an improved pathway in terms of structures, organisations, other factors?
- What needs to happen to support implementation locally and nationally?

These questions have arisen post data collection, but our findings do provide some indicators that can be used as evidence to support the work of the pathway groups.

First, the physical assessment module has been attended by practitioners that work in some of the workforce streams and specified clinical pathways (of note cardiac, stroke, emergency surgery in acute services and those providing for the chronic care agenda and end of life care in primary and community services). The module enabled these practitioners to fulfil their advanced roles and provide nurse led services and increase access to patients that is locally provided and closer to home (e.g. cardiac services provided in a local poly clinics). Other roles (e.g. emergency care practitioners, outreach and night nurse practitioners and stroke care specialists) have ensured fast track access into specialist services provided within the acute care trusts to ensure best possible chances for recovery for the patient. All the alumnae felt that the module enabled them to make initial assessment and plan care and ensure the patient was placed on appropriate care pathway or referred onto other services should the need be identified. Of note, the module was considered foundational to enable practitioners to undertake a prescribing course and then practice prescribing. Most considered that as a result of the module they were able to provide care that was safe, timely, effective and efficient, equitable and patient centred. Patients concurred with this view (see section 5.3 above). Of those who did not feel they were able to contribute this had more to do with organisational inhibitors, notably negative medical opinion or poor nursing leadership that meant that their skills were put to use to address internal and national targets rather than use their newly acquired skills to improve the patient experience. In this site, duplication of effort, whereby doctors repeated the physical assessment led these participants to express concern that they were not able to provide effective or efficient services by deploying their skills (see section 5.2).

Secondly, the publication of the national Education and Competence Framework for Advanced Critical Care Practitioner (DH/Skills for Health, March 2008), sets out an explicit programme and time frame by which such practitioners should be prepared. Linked to the competences set out by the Competency-Based Training in Intensive Care Europe (CoBaTrICE), the commonalities and differences of the practitioners in this role to that of their medical colleagues¹⁷. The list of competencies are extensive and the guidance on mentorship and supervision explicit. The programme is normally expected to last 90 weeks with

¹⁷ Scholes acted as a nurse and educational advisor to the CoBaTrICE expert panel reviewing the original competences for Consultant Intensivists.

integrated theory and practice and that practitioners should exit with a post graduate diploma after 3150 hours of nominal study, 2205 hours designated for clinical learning with up to 945 hours in clinical skills centres. The report clearly has the markers of values inherent within medical training programmes. However, it does set at odds the exit award of post graduate diploma (normally equivalent to 1200 hours of notional study) but could reside as a substantive component within a masters award, expected notional hours of study 4,800 (QAA, 2001).

The competences for this programme are divided into key streams and the core theoretical components of learning have been stated as:

- core anatomy and physiology
- history taking and examination
- clinical reasoning (differential diagnosis commonly encountered in critical care conditions and physiological diagnosis and decision making)
- communication
- legal issues
- core radiology
- principles of microbiology
- principles of laboratory medicine
- technology in critical care
- discharge planning and rehabilitation
- end of life care
- organ/ tissue donation
- patient safety, risk management and clinical governance
- clinical leadership and management within the context of the multi disciplinary team
- learning and teaching
- surgical procedures and what they involve
- ethics
- evidence and research (DH/Skills for Health, 2008 p21-23).

The physical assessment module delivers a programme that meets generic issues associated with the first five of these topics, but would require further application, supervision and direction back in clinical practice to achieve the level of specificity set out for the advanced critical care practitioner (which could according to the guidelines be provided in the work place under the direct (observed practice) or indirect supervision (within five to thirty minutes attendance by the clinical supervisor (Ibid, p 25). The other theoretical components would have to be provided by the existing suite of modules within the post graduate portfolio, with new modules added notably around core radiology practice, organ and tissue donation, principles of laboratory medicine. However, core elements set out in the National Framework might be covered from the generic portfolio of modules, but once again this may be problematic as credits can not be double counted.

The Competence *assurance* framework for Community Matron and Case Managers (NHS, 2008) is less specific and these programmes cover content such as:

- Advanced assessment skills
- Long term clinical conditions
- Clinical practice
- Long term conditions and case management
- Specialist practice
- Prescribing (for eligible practitioners)
- Teaching and learning
- Leadership

Both these advanced practitioner courses are assessed using portfolios of evidence, but the ACCP has far more specific attention to the detail of competence acquisition that has to be recorded and demands direct observation of performance to quality assure performance (NHS, 2008, DH/Skills for Health, 2008). The existing frameworks provided by the local HEI providers does address the content set out within these topic areas and the physical assessment module explicitly providing theoretical and practical components for advanced assessment skills.

Therefore, the physical assessment module can be seen to be a timely and necessary programme within the suite of modules that can inform the practice of advanced level practitioners in both acute, primary and community settings. It would appear within the right organisational environment, it informs the practice of the alumnae to provide new roles, out of hours services, unscheduled care, care to meet the needs of patients with chronic conditions and other local primary and community care initiatives that is safe, timely and effective.

The next chapter examines the implications for the professions by examining the roles practitioners adopt using different theoretical lenses by which to view the concepts of substitution, delegation or complementarity of roles.

6 Substitution, delegation or complementarity?

The Wikipedia definition of these terms:

'Substitution: the replacement of one thing with another'.

'Delegation is the handing of a task over to another person, usually a [subordinate](#). It is the assignment of authority and responsibility to another person to carry out specific activities. However the person who delegated the work remains accountable for the outcome of the delegate work. It allows a subordinate to make decisions, i.e. it is a shift of decision-making authority from one organizational level to a lower one. Delegation, if properly done, is not [abdication](#). The opposite of effective delegation is [micromanagement](#), where a manager provides too much input, direction, and review of 'delegated' work'.

Complementarity: 'X is something that together with X makes a complete whole, something that supplies what X lacks'.

6.1 Introduction

The impact of the physical assessment module on the nurses' practice stimulated discussion about the transformation of their practice into a substituted or delegated role. Could this learning ever serve to complement the work of the whole multi professional team or could it only be considered as training for an understudy role for the doctor? What were the benefits of this learning for patients, the Trusts and the wider NHS? To answer these questions one has to explore the findings through the lens of the various stakeholders: the organisation (trusts), the medical profession, the nurses who undertook the programme, the patients and their relatives and finally the tax payer. Drawing on delegation theory, the final chapter will explore the relative benefits and losses to each one of these stakeholders. First, there is an exploration of whether the roles can be seen to be delegated, substituted or complementary when a nurse incorporates physical assessment into her professional repertoire. To situate this debate definition of terms are presented

6.2 Is physical assessment undertaken by nurses medical substitution?

Night practitioners and those offering out of hours services could have been viewed as adopting a position of explicit substitution because medical cover might be offered from an off site on call basis. Put simply, if a nurse is present when a doctor isn't, does this represent substitution? Definitely not, if they did not do what the doctor would have done if they had been present. However, the findings from this study suggest that labelling such practice as substitution is made by some stakeholders however erroneous and over simplistic.

In this study, many of the nurses in acute care provided services to complement the activities of their medical colleagues e.g. Outreach nurses and specialist nurses running nurse led clinics. Thus they delivered services that may have previously been provided by a doctor, but they did so with a difference. Thus some actions, notably undertaking the physical assessment could be viewed as substitution (i.e. undertaking a component of medical function), but subsequent action was informed by their nursing experience, knowledge and clinical reasoning. Therefore, these nurses were seen to be acting as advanced nurse practitioners operating with extended clinical skills, rather than functioning within highly specialist and technical re-engineered roles that could be construed as a physician's assistant or agent (Manley, 1998). The distinction is in the degree to which the nursing role was overshadowed by medical functions (Donnelly, 2003).

For many of the practitioners, they maintained a high degree of interdependence with their medical colleagues. In the community, because the nurses, like those in nurse led clinics, provided a one to one service, they made initial assessments autonomously, but where there was doubt referred the matter onto their medical colleagues, sometime specialists, other times their GP colleagues, for resolution. This demonstrated that the nurses did identify unmet need and this did increase the number of referrals especially when new to post, a finding similar to Lankshear et al (2005 *b*). However, this demonstrates positioning on a continuum of interdependence on colleagues, rather than an erroneous label of medical substitution even though much of the unmet need they identified (although not exclusively) tended to require medical resolution. Of note these data captured many practitioners who were assuming new roles, and undertaking the physical assessment course at the same time. The notion that nurses 'grow into their role' building confidence to expand their scope of practice and autonomy with time, mirrors a number of other studies (Guest et al, 2004; Lankshear et al 2005*b*). For these nurses they were trying to establish themselves as well as their new knowledge that heightened their desire for affirmation that they were undertaking their assessments well and accurately. This suggests that at the outset, nurses undertaking physical assessment may demonstrate greater dependence on their medical colleagues to confirm that their physical assessments were correct, but this was a transitional phase associated with the novelty of the practice. This level of dependence on medical colleagues led some to view the activities of physical assessment to be purely medical substitution rather than a reconstruction of practice knowledge.

This view however could be challenged when examining those undertaking the skills in established roles e.g. Outreach and Heart Failure Nurses. Here there was clear indication that they were pushing the boundaries of their practice. The physical assessment module gave them more knowledge to systematise their assessment but also more techniques with which to undertake more refined assessment of other systems. In addition, by doing this it had an impact upon their capacity to reflect on their decisions, formulate differential diagnoses,

review and advance what they did. Receiving feedback and making reference to medical colleagues, served to confirm in both the doctors' minds as well as the nurses', that their actions were appropriate, timely and sound. With this evaluative feedback came increased confidence for the doctors in terms of assurance that the substituted task was well managed, but for the nurse that she had done well. Formalising such an evaluative process served to reinforce the notion of 'correct practice' or 'getting it right' and mitigate against the concern that diagnoses had been missed or treatment wrongly ascribed. This resulted in the nurses exercising greater freedoms to broaden the scope of their practice and their medical colleagues having every confidence in them doing so. Building a body of experiential knowledge to complement knowledge acquired on the module, enabled the nurses to cope with increasing complexity, recognise more subtle changes in patient well-being and action interventions appropriately. In some instances, this related to 'watchful waiting' when assessment findings proved to be inconclusive. Here one can see how they incorporated the medical elements into their practice and made them their own thus complementing the work of their medical colleagues.

The Community Matrons, were caring for patients with chronic conditions and suffering from the effects of multiple pathology, therefore they could be seen to be serving a constituency of highly complex patients. Case management demanded that they use a broad repertoire of not only physical but psychosocial assessment for their patients and here one could see an incorporation of a new repertoire of skills to enable them to function independently more effectively.

Therefore, the alumnae in this study were operating across boundaries, rather than finding themselves operating in the outer edges of the 'medical silo'. Although there was anxiety that undertaking physical assessment would overshadow the nursing component of the alumnae's practice, this in all but one case was not evident.

Medical substitution in pure form, could therefore be argued as being a form of silo maintenance especially where the practitioner is required to deny their disciplinary pedigree. The practitioner simply leaps from one silo (nursing) to another (medicine), cross boundary and creative working is not liberated but essentially dominated and through continuing medical control. It may serve some purpose for highly specialist and technical roles (physicians assistants anaesthesia), or surgeon's assistants, but the practice of incorporating physical assessment into the repertoire of care for the alumnae in this study did not demand such a significant shift.

Delegation of physical assessment under specific conditions was however apparent. To achieve this the nurses did have to adopt elements of practice previously considered to be within the orbit of the medical practitioner, but not to the exclusion of their nursing. Some managed this by iterating in and out of the different elements of the role (seeing their nursing and physical assessment as two distinct activities), but the more successful, confident and established were able to seamlessly incorporate these skills into their caring repertoire that served

to add value to their overall practice. In this way the physical assessment skills served to complement their practice which in turn served to complement the activities of the health care team. The transition to achieving the state of complementarity was not without its problems, notably where role ambiguity and relationships with colleagues (Jones, 2005) made the transition less than smooth. Furthermore, organisational and management restructuring served to create uncertainty and upheaval that delayed (or in one site extinguished) the possibility of complementarity to be realised.

Challenges to the notion that physical assessment can provide complementary rather than substituted working can arise from the ideas associated with legitimate knowledge and its application. The end point of an assessment is a diagnosis, clinical decision or judgement (Lee et al, 2006). How this is formulated and the legitimisation of the knowledge used to inform that decision challenges assumptions about substitution and delegation. Can the task of physical assessment be truly delegated or substituted if the diagnosis, decision or judgement does not equate to one that would have been formulated by the delegator?

6.3 The notion of a differentiated diagnosis

The literature comparing physician and nurse decision making indicated that physicians drew on findings of pathophysiology whereas nurses tended to draw more heavily on psychosocial aspects (McLaughlin et al, 1979). The disciplinary training of the practitioner influenced the cues used to organise findings and conceptualise these under diagnostic labels (Carnevali, 1984). Logical, rational, linear decision making processes are linked to the scientific and positivist tradition (Lee et al, 2006) and medical curriculum are predominated by subjects originating in the natural sciences. Therefore, doctors are explicitly taught as well as socialised to formulate diagnoses primarily based on rationalist, hypothetico-deductive, linear, cognitive processes. Psychosocial and situational aspects were more influential in nurse decision making and these in turn were influenced by factors such as 'knowing the patient' (Jenny and Logan, 1992), making a connection with the patient (Parker et al, 1999), and intuition (Benner and Wrubel, 1982, Offredy, 1998, McCutcheon and Pincombe, 2001, Smith et al 2004). The process of decision making for nurses is grounded in four reasoning strategies: anchoring, attending, focussed questioning and listing (Fisher and Fonteyn, 1995) and is strongly influenced by notions of patient advocacy (Parker et al, 1999). However, the specialist area in which a nurse works, does fundamentally influence the types of knowledge they use to inform their decisions (Lee et al, 2006). The findings from this study suggest that when a nurse is asked to substitute for a doctor in undertaking physical assessment, this requires more than simply increasing the pathophysiology knowledge base or teaching assessment techniques, it requires some form of *conceptual reprogramming*, if the nurse is to achieve an equivocal diagnosis to that derived by the doctor.

It is for this reason, that the physical assessment module team deliberately used the term 'differential diagnosis' to describe the outcome of the physical assessment the students were taught on the module. Thus pattern recognition, similarity recognition, commonsense understanding, sense of salience as well as deliberative reasoning derived from experience as well as knowledge acquisition could be used to full effect to maximise the clinical decisions they made (Dreyfus and Dreyfus, 1986). However, much of the programme was taught by doctors, whose pedagogic tradition (and thus style of teaching), mirrored a more linear, hypothetico-deductive rational orientation to content delivery. As many of the assessors and mentors for the nurses were also doctors, their clinical teaching and practise was also dominated by this approach. Thus the emphasis placed on repetition of techniques as a means by which the new learning might embed itself into the nurses' cognition served as a form of conceptual reprogramming¹⁸. Secondly, and highly valued by the nurses, was the way in which this rational deductive approach served to form a systematic approach to assessment. The step-by-step approach seemed to disentangle the complex mass of other situated data they might have otherwise used. So it was not only new knowledge and techniques that were at stake but also a new way of thinking. This might explain why the nurses who did not regularly use the techniques found that they rapidly became redundant because it was so dissimilar to their normal mode of decision-making. Once again this raises doubt as to whether the module served to inform practitioners who worked in explicit delegated or substitution roles or whether it served to expand the nurses' practice in a complementary way to the rest of the health care team¹⁹. It may also explain the reason for increased referrals to medical colleagues to seek assurance that erroneous differential diagnoses had not been made or that diagnoses had not been missed.

An alternative approach to this conundrum, is to micro manage clinical decision making by reducing the number of options that can be taken through the form of protocols or guidelines.

6.4 Micro management: risks and reality

There is a risk that protocols can serve to micro manage performance especially where roles are conceptualised as delegated activities. Drawing on Principal-

¹⁸ Repetition also served to enhance the performance of the technical skills in terms of the fluidity by which they were undertaken and dexterity in handling equipment. Discovery and deduction from experience can be considered as higher order activities (Gardner et al, 2007), the extent to which the conceptual reprogramming affected the type of decisions made in the long term and the potential for missed or erroneous diagnoses requires further research.

¹⁹ This may also serve to explain why some medical staff are adamant that nurses who undertake delegated or substituted roles should be conceptually re-programmed, re-socialised into 'medical lines of thinking' so they more readily adopt scientific, rational deductive modes of clinical reasoning (Scholes et al, 1999). It may also explain why practitioners from the scientific disciplines (laboratory based scientists, pharmacists) seem more attractive to some medical colleagues where delegation or substitution is explicit, as they share a similar conceptual pedagogic framework in their decision making from the outset.

Agency theory, the protocol can be seen to act as a post control, established by the principal (medical staff and or the organisation) before delegating an activity to an agent (in this case the nurse undertaking physical assessment). Such an action serves to maintain compliance that benefits the principal more than the agent. Two examples from this study served to counter this perspective. In both instances the notion of continuing professional accountability rested with the Consultant despite two extremes in terms of how the roles were enacted within the different trusts and their outcome for the agents. These are now reviewed.

In the first example, the use of protocols served the nurses' well, particularly where they felt under confident in their actions, notably in one of the acute care trusts where autonomous nursing roles were novel. Protocols were seen to give licence to ordering further investigations, or instigating certain treatments and an overt message from the Trust that they supported the nurses to practice in this way. Of note in this trust, there was some considerable reticence among the medical staff to any role expansion by the nurses resulting in resistance to substitution or delegation of roles. The notion of continuing medical accountability for the delegated actions of the nurses served to inhibit the nurses' undertaking physical assessment, because the medical staff would come and repeat the assessment. The limitations exercised to allowing the nurses to instigate further investigation or treatment, served to reinforce the notion that physical assessment was duplication of effort, an inappropriate use of the scarce nursing resource and may even cause additional discomfort to the patient. The outcome was that the nurses stopped using the skills acquired on the module. This finding echoed that of Jones (2005) who identified that role ambiguity and relationships with other health care professionals were key barriers to be overcome when implementing a new advanced nursing practice role. Furthermore, at this Trust, in the absence of any organisational stamp of approval, whether in the form of a protocol to organise and legitimate expanded areas of practice, or other organisational marker to indicate the cultural acceptance of nurses using their physical assessment skills led to the skills being lost to the individual and to the organisation who made the initial investment. A commitment to send the staff off to acquire the skills was not matched by any organisational or managed system to allow the skills to be put to use. Here we can see that the Trust maintained its credibility and 'commitment' to staff development to meet the modernising agenda, but failed to meet its obligation by creating a permissive environment in which the role could be enacted.

In the second example of nurse prescribing, patient group directives (PCDs) were favoured where they related to a group of drugs that could be prescribed or titrated by the nurse, especially where these were commonly required by the client group they served. This enabled the whole team to operate within the PCD and not rely on one nurse prescriber. In one example, the drugs listed in the PCD were medications that did require a significant body of specialist knowledge but provided the specialist nurses with freedoms to manage

prescriptions according to the patient's physical findings. Operating within the PCD illuminated areas where further developments to the role could be identified and expanded. However, within this team it was clear the roles assumed were framed within a complementary framework, but part of the complementarity was considerable freedom and opportunity to practice autonomously. Nurse led clinics run alongside the medical clinics and ward rounds attended by the nurse specialists and the medical teams ensured ease of access for referrals and exchange of information / consultation should this be considered necessary. Whether this started with an explicit intention to ensure the medical staff could monitor the actions of the nurse specialists is unknown, but as the role holders and the medical staff gained confidence in their actions, greater freedoms were realised. This illustrates that some strategies that might initially appear to err on the side of micro management and or continuing medical control, can in fact create liberating opportunities for complementary working as both the medical staff and the post-holders gain confidence and the roles mature within the organisation.

6.5 Economics of delegation and substitution

A critical question is in whose interests did these delegated roles serve? Were they solely to benefit patients, the medical profession, deliver cost savings to the tax payer, or did they enhance nursing performance?

The notion of complementarity challenges assumptions about cross boundary working and also questions whose benefit these roles serve. If complementarity is viewed as a contribution toward making up the whole or supplying something that X lacks, it helps to dispel myths that to take on one task is at the expense of another. However, if one views activities as cross boundary working it assumes that if nurses take up physical assessment they somehow occupy part of, or encroach upon, a medical role. This may or may not be of benefit to them or their patients.

In this study a number of stakeholders expressed a concern that as nurses assumed physical assessment they would either cease to act as nurses or would focus entirely on physical assessment rather than other components of assessment to inform their caring activities. In part this can be explained by the way in which professional knowledge was organised and used (see section 6.3). However, this dichotomous 'either or' state of role enactment seemed to have more to do with the mind set of the individual practitioner, the value they placed on their nursing identity relative to the value ascribed to undertaking techniques previously associated with medical practice, and the extent of pedagogic or socialisation they encountered in their role. It was the sum of these parts that influenced how these new skills were incorporated into the repertoire of caring or whether or not this was extinguished. Where there was a strong nursing identity the act of undertaking systematised physical assessment became a component of the repertoire of their professional (nursing) performance. As such they went

to the patient primarily as a nurse who had an expanded role, rather than a practitioner who was acting on behalf of the doctor. Physical assessment may have been performed in, or because of, the absence of the doctor, but provided the nurse with profundity on which to base her assessment and subsequent actions. So rather than act as a medical substitute, she acted as an informed nurse specialist who complemented the activities of the team²⁰. Indeed as many of these nurses were observed enacting their physical assessment skills, one could see how they used their experiential wisdom gained from years of nursing and weaved in new physical assessment techniques to augment their craft of assessment. The analogy would be of adding a new instrument to an orchestra because it added new tonal qualities, but not expecting that instrument to drown out the music of the orchestra although sometime it may be placed centre stage and played solo.

Notwithstanding this explanation, there were some individuals who considered their nursing pedigree to be stigmatic and used physical assessment to ape their medical colleagues in an attempt to upgrade what they considered a spoilt identity. The literature reports that in some substitution and delegated roles where medical control is strongly maintained, any attempt to hold onto a nursing identity was actively discouraged with explicit social pressure to see any association extinguished. This was done through socialisation, medically controlled training, removal of the term nurse from the role title, encouragement to seek medical indemnity insurance and withdrawal from the live nursing register (Scholes, Vaughan and Furlong, 1999). No one expressed such an experience within this research, although one practitioner was found to be preparing to assume a partnership role in a GP practice and could see little difference in what she did from her medical colleagues. Another practice nurse attempted to set herself apart from her nursing colleagues, and was conscious of the environment in she reviewed patients to express an outward marker to others of the difference in her role and the type of tasks she were prepared to undertake. However, these actions seemed to have more to do with status enhancement for the individual than medicalisation of the role per se.

Where physical assessment skills were integrated into nursing practice, stakeholders reported benefits for both the patients (plaudits for the nurses and the service), the nurses (job satisfaction, enhanced confidence in their knowledge and action) and medical colleagues (who benefited from the redistribution of the workload). If physical assessment skills were adopted at the expense of nursing activities this might enhance the nurses' perceived status, benefit the doctors who maintained tight control of the actions of the practitioner but would deny patients components of nursing care they might have otherwise received. The extent to which this could benefit the tax payer is open to question, not least of which was the difficulty in attributing the activity of the nurse undertaking physical assessment and managing care with any cost saving

²⁰ The 'mini doctor, 'maxi nurse' debate (RCN 2005).

within the service, or cost saving to another service or agency. Proxy measures of this through audit and links back to targets are imprecise and are often overshadowed by concerns from health economists that increased consultation times, failure to assay long-term patient outcomes may lead to increased expenditure (Lankshear, 2005 b). Furthermore, 'time inconsistencies' whereby short term solutions (financial savings to redress overspend) that are different to optimal long term solutions (modernising agenda), may impact upon the nurses who assume delegated and or substitution roles experiencing job security. With two different government agencies set in place to drive these activities, the NHS executive driving the turnaround agenda and cost savings, may view delegated task of undertaking physical assessment in various roles to be an expense and thereby legitimate targets for cost savings even when the DH continues to press for modernising agenda with more, rather than less, delegated and substitution roles. Here we can see accountability to the tax payer being the primary driver for short term action and the nurses in post being placed in a distinct disadvantage and experiencing loss. Medical colleagues who support these roles and establish new services because of them also loose out to the short term goal. But patients and relatives who have established strong relationships with, and sometimes dependence on, their nurses stand to loose the most.

The counter argument to this position is that when work is shifted from junior doctors to nurses this serves to redress capacity issues for doctors but shifts the shortfall to nurses (Calpin-Davies & Akehurst, 1999; Wanless, 2002). At a time of registered nursing shortage (Lankshear, 2005), fewer nurses have to delegate activities to a support workforce. So although evidence indicates that patient outcomes are not adversely affected by medical substitution by senior and well trained nurses, there is evidence that support worker acting in substitution for nurses, does have a deleterious effect on patient outcome (e.g increase in iatrogenic disease such as health care associated infections, pneumonia, urinary tract infections, blood stream infections, wound infections, and pressure sores; as well as adverse incidents and failure to rescue and complication rates) (Lankshear et al 2005 a and b). This led the authors to conclude that substitution and delegation of nurses in roles previously undertaken by medical practitioners constitutes a 'large social experiment with significant risks for patients and the tax payer with poor evaluations of its costs and benefits' (Lankshear et al 2005 b,p6). They also add the caution that there are no longitudinal studies to indicate whether nurses fail to recognise, diagnose and act upon serious illness and whether nurses can manage complex cases more effectively. Furthermore, there is a lack of data to indicate if savings are made because of what doctors do with the time that is freed by nurses undertaking substitution roles, does this free them to care for more complicated patients and can there ever be eradication of the duplication of effort?

Nurses in substitution roles in primary care provide longer consultations (Freeman, 2002), more detailed information (Laurant et al, 2005), access to continuity of care that enhances the rapport between the practitioners and the

patient and increases their compliance to medication and treatment regimes. Unsurprisingly, this was popular with patients (Lankshear, 2005a). Nurses had higher patient recall rates, and were deemed to have lower productivity than their medical colleagues (Laurant et al, 2005). However the lower salary of the nurse relative to the doctor offset any potential increase in cost although this was context specific (Lattimer, 1998). The identification of unmet need by nurses and increased ordering of investigations was another area where substitution did not account for cost saving (Lankshear, 2005b). Although Lankshear et al (2005 a) concluded in their meta analysis, that there was no difference in patient outcome for those cared for by nurses in substitution roles to doctors, they concluded that this was cost neutral when all the factors were taken into consideration. Thompson and Watson (2003) argued that cost effectiveness should not be the sole measure when assessing the impact of these roles, patient satisfaction and accessibility were also important considerations. Such an approach has been echoed in Lord Darzi's interim report (2007), which also sites the importance of improved safety, effectiveness, personalisation, fairness and value as evaluative criteria when assessing the potential for innovation. Furthermore, Darzi (2007) pressed that patient satisfaction and patient reported outcome measures should be reviewed when considering clinical quality. Therefore, patient satisfaction and accessibility will become important evidence when making a case for new services. In this study the nurses who assumed new roles that involved medical substitution whilst using their newly acquired physical assessment skills, were very successful in increasing accessibility to services and also received exemplary plaudits from their patients. One might conclude, that at the time of this report, cost saving or at least cost neutrality taking precedence over any other quality consideration, may be of that moment and now consigned to the vaults of history. However, the growing power of health economists in advising on future health policy may see residual tensions between cost and quality remain or simply be replaced by the new agenda of greater productivity linked to performance *rewarded* pay (Darzi, 2007).

6.6 The notion of informational asymmetries

Principal-agency theory, suggests that as the agent assumes a new domain of working they accrue knowledge and fields of work that, over time, create their own source of information that can then place them in a stronger authoritative position than the principal who delegated the activity (ref). In this study, such asymmetrical informational relationships were not specifically evident other than in the dynamic relationship that some of the alumnae formed with their patients and relatives. For them, the use of physical assessment gave legitimation to run nurse led services (e.g. nurse led clinics, outreach services, chronic care case load management), which placed them in a position of proximity to the patient, continuing interaction (through longitudinal association with the patient and their family) and a capacity to compare their patients' progress or deterioration and manage their care or titrate medication according to need. However, within the greater structure of health care provision, medical control was maintained in

some form or other (either through the generation of protocols or guidelines to limit the scope of their practice), the maintenance of clear lines of referral, the close proximity of medical clinics run in parallel to the nurse led clinic, or indeed through the continuing dominant position of a mentor who guides, advises and supports the nurse. This could be constructed a good team work or indeed an ideal state that the nurse has self determined and to which she gave consent either overtly or implicitly. The asymmetrical power within the system resided with the medical Consultant or GP who ultimately could sanction or prohibit further role expansion. Subversive acts or covert transgression of the limited power base to act beyond the legitimated scope of practice were rare within acts of undertaking physical assessment. They were more likely to occur as acts of common sense expediency to assist a patient (a Community Matron going to the pharmacy to collect medications for a patient, dropping by to reassess a patient en route to another patient, limiting the number of patients on the case load to ensure the nurse provided the standard of care she considered necessary for her patients), directed more towards 'the system' that defined their role, than directly at medical action. Each of these examples had more to do with the 'valid use of their (expensive, professional) time', as construed by a manager, rather than subversive acts of overstepping the boundaries of their practice that had been negotiated with their medical colleagues. For some the dissonance these acts created caused the alumnae to call for assistants to whom they might delegate non technical or medical tasks, so they might focus on the legitimated areas of their practice as defined by the nurse and the medical team.

This might have something to do with the novelty of the roles that sustained the informational asymmetry (or that the alumnae suspended subversive acts in the presence of a researcher). Some evidence was found of where asymmetrical information did indeed reside with the agent. In one observed incident, an established Senior Medical Practitioner deferred action to an Outreach Nurse Consultant to manage the care of a rapidly deteriorating patient. This was done in the knowledge that the Outreach Nurse Consultant held greater know-how about the system and held established and influential relationships with the Intensivists that would predicate prompt action for that patient. The Nurse Consultant was able to assess that patient, take action to relieve some of the symptoms to stabilise the patient, then set to work to ensure the patient was either admitted to intensive care or a 'do not resuscitate order' was put in place by the parent surgical team. Her established role enabled her to 'cut to the chase' to pass up the power of such a potent decision to her medical colleagues, a decision she adamantly argued was not hers to make. She knew where the Intensivist would be at that time and went direct to him with the patient's notes, and asserted his presence was necessary at the bedside to assess the patient and make this decision. In this scenario one could see that a subversive act was going face to face with the Intensivist to retrieve him and prompt his action, made on the basis of her understanding of an asymmetrical relationship she held with the patient's surgical Consultant, who was at the time in theatres. All this was done in terms of attempts to reduce the patient's

suffering but also to ensure a clear plan of action was set in place. This suggests that in complex systems, asymmetrical information and power between medical staff and nurses are not unidirectional nor clear, but relational, situated and context specific. Here the Nurse Consultant's actions were predicated on notions of advocacy for her patient but she used her considerable influence and respect within the critical care team to ensure appropriate action was set in place²¹.

Many of the roles taken by the alumnae were new to the Trust. Most were initiated by health care policy that predicated certain service developments. Most occupied fields of practice that were specific. The novelty of the role invariably set them apart from other personnel. This had the advantage of giving licence to continually redefine the boundaries of their practice but also made them highly visible because of their 'otherness'. With this came the risk, that what ever informational asymmetry they accrued whilst undertaking the role, they ultimately were at risk of swings in policy that would redirect funding to other priorities, or economically determined managerial decisions surrounding cost containment. The greatest source of informational asymmetry came from being beside the patient, and providing direct care. This provided the logic of why they were trained to undertake physical assessment of the patient and manage their condition. Therefore, for all of the alumnae to loose their place beside the patient meant loosing the source of their informational asymmetry and 'power'. Being pushed toward management roles or to lead through indirect contact with the patients, resulted in all their (and their mentor's) personal investment (and the investment made by the Trust to commission the training) directed at learning physical assessment techniques went to waste. This indicates that policy and economic managerial decisions always hold ultimate power that cannot be resisted by any amount of asymmetrical information that may have been accrued by the alumnae. Informational asymmetry are time bounded and subject to change.

6.7 A sociological critique of substitution, delegation and complementarity.

Aranda (2008), offers an alternative explanation. Using Bourdieu's key ideas, and feminist critique of his work, she examines the way in which nurses in advanced roles, are destabilised by the increasing medicalisation, marketisation and managerialisation of their work. Through this lens, notions of substitution, delegation or complementarity are constructed by the agent (the alumnae), but subject to the structure of social order in which they exist. Identities are formed and reformed and are a part of 'complex expressions of strategic action'. Therefore, advanced nursing roles can be seen to be methods by which nurses' gain for themselves, increased status, rewards and remuneration (capital).

²¹ Several ethical and moral arguments alongside duty of care made this scenario more complex, including the patient's age, general debility, her recent admission to the hospital resulting in an emergency surgical procedure.

These are gained through strategizing, generated from experience and personal professional experience that guides action. This position is achieved through imitation, iterative learning and socialisation, but essentially is shaped by the social structures (and organisations) in which they work. The combination of these factors is termed as 'habitus'. 'Habitus' operates in relation to 'fields', distinct social spaces structured by culture, traditions and authorities, and this impacts upon the 'capital' or power of the individual to conserve or improve the person's position within the field. Credentials (or qualifications), knowledge and prestige are evidence of one's accrued capital. This can be used to occupy new areas of working, that politically are contested and fought over. However, operating outside traditional boundaries or fields requires new knowledge to be accrued and in some instances, behaviours of the dominant culture adopted. In this study, this explicitly was done through the acquisition of elements of medical practice that then became adopted by the alumnae as their 'own'. However, Bourdieus' theory of cultural domination suggests that this may simply imply that the nurses who seek to occupy this field of practice, may increase their social capital relative to other nursing groups but not relative to the dominant medical culture. Therefore, they can not 'own', but rather 'borrow' this practice. Those who do so jump from the 'nursing silo' into the 'medical silo', rather than significantly restructure and reshape health care services in an unbounded way; but it gives them permission to practise in ways that would otherwise not be allowed if they continued to habituate the 'nursing silo'. To maintain this position they have to submit to, collude with and accommodate their medical colleagues. This can be seen acted out through the alumnae's various endeavours to seek approval, maintain open lines of communication and referral back to their medical colleagues. Such behaviours are justified on the grounds of good team working but most importantly improving patient services, and ensuring they do the 'right thing for their patients'.

This analysis would indicate that the alumnae are simply economic substitutes for the doctor, because they provide for a lesser sum, services that would have traditionally been provided by the doctor. However, as previously discussed (see section 5.5) it is not clear that these roles do in fact provide costs savings, they are at best cost neutral (Lankshear et al, 2005 a). For this reason it could be argued that these practitioners are simply plugging gaps in the system created by an inadequate number of doctors²². As demand for these types of services increases, more qualified nurses are expected to step up and gain the credentials to enable them to do physical assessment to widen the scope of provision. The logic of this argument takes physical assessment training back to pre registration training, where the basic principles should be taught so that at the point of qualification the registrants can be 'fit for purpose'. In so doing, more nursing has to be delegated to assistants to free the registrants to take on this

²² The changing workforce programme (2001-2005) was set in place to redesign staff roles by combining tasks differently, expanding roles or moving tasks up or down the multidisciplinary ladder (Bridges and Hyde, 2007). The way in which these nurses adopted physical assessment skills into their repertoire of care provides an illustration of this type of shift in skills to promote new ways of working.

role. This would suggest that the field of practice traditionally occupied by nurses is at threat of being rebounded, restructured and redefined without disturbing the status quo of the medical dominant culture. This pessimistic view of change is indicative that critiques of maintaining 'professional silos' are levied at nursing rather than medicine. As nurses fight to maintain what they consider to be core to their field of practice, and their legitimate place beside the patient (Benner and Wrubel, 1989), they will have many battles to fight with those who would wish to re-engineer (modernise) the field of nursing.

The optimistic view is that these practitioners, whether labelled substitutes, delegated agents or complementary practitioners, take on physical assessment skills to ensure their place beside the patient. This practice gives them licence to 'close a door' (front door, clinic door, pull a curtain etc) and engage in high quality interactions with their patients. A practice that the alumnae value, and more importantly, so do their patients and their relatives.

6.8 Concluding remarks

When examining the impact of the acquisition of physical assessment skills and their use by nurses, one has to view this through the lens of various stakeholders. Further, the theoretical lens with which these perspective are then analysed, adds further complexity to any assertion over the net gains and losses to those involved. The field occupied by the stakeholder will necessarily affect the perspective with which any evaluation is made, as each stakeholder seeks to defend, promote or serve their paramount concerns and imperatives. Thus any conclusion can be given a positive spin, linguistically constructed to be 'on message' within these different and sometimes competing agendas.

This evaluation has illuminated that the gulf between those who drive the modernising agenda and those who deliver the service that is in the process of being 'modernised', is ever widening. This results in turbulence, instability and uncertainty for those attempting to provide care to patients, created by those who are determined to drive forward changes to the services that care. Changing demographics, health care demands, new technologies, shortfalls in the staffing resource and rising costs all demand health care practitioners to work differently. The net result is that different people working differently within, or for, the health service, proffer different solutions for workforce redesign and the pace of change. Furthermore, that these different people occupying different positions within the service, respond to different triggers that affect their conclusion as to whether or not the changes made have been a 'success'. Performance rewarded pay increases the motivation of those in different positions to meet their targets and in some instances force compliance to ensure those targets are met be they related to economic measure, productivity, quality agendas, or all of these. It is in this context that the evaluation concludes, acknowledging that the outcomes illuminated by the study may be considered by

some as successful but for others, challenges that demand further workforce redesign.

6.9 Summary points

The application of physical assessment to inform differential diagnoses requires the nurses' to reorganise and formulate assessment findings using hypothetical-deductive models of decision making akin to their medical colleagues. Therefore the translation of these skills into clinical practice requires frontloading of a broader pathophysiological knowledge base as well as learning techniques of formulating diagnoses or clinical decisions that require an alternative method of organising data. This can be termed conceptual reprogramming.

The cognitive tasks associated with conceptual reprogramming requires supported learning in practice. This learning extends to beyond the time constraints of the module. Any attempt to further truncate the module length on grounds of expediency may be a false economy.

Once conceptually reprogrammed, rehearsal of techniques and formulation of differential diagnoses are essential to avoid skill fade. In this case, skill refers to the conceptual skill to think and organise information to formulate differential diagnoses from the physical assessment as much as dexterity in the techniques used to gather these data in the first instance.

The successful implementation of physical assessment skills into practice is influenced by the nurses' metacognitive capabilities as much as her personal attributes. These personal attributes include:

- those who hold a strong belief that they will be successful in undertaking the physical assessment (high degree of self efficacy),
- personal drive and professional deportment to overcome barriers to the successful enactment of the physical assessment skills within role that they may encounter from colleagues
- personal drive and professional maturity to negotiate and overcome organisational barriers
- recognition of personal limitations and willingness to continue to enhance knowledge and skill or make referral onto other practitioners or agencies where they are unable to make independent judgements.

Any conclusion as to whether the use of physical assessment by nurses constitutes substitution, delegation or complementarity is influenced by the conceptual lens by which these data are viewed. Nurses may be required to provide care in the absence of doctors, but this is not substitution unless they provide a service that would have been provided by the doctor had they been there. This requires them to build a knowledge base and skills equivalent to the doctor for the substituted task. This also requires rethinking of information by the nurses to order this information in a way that allows them to fully substitute for

the doctor. There is considerable doubt that the module length can provide the nurses with equivalent knowledge to achieve this outcome. This requires continuing support and supervision by medical colleagues if this is to be achieved.

The nurses learn how to use extended physical assessment skills that were once considered the province of the medical practitioner. As they acquire these skills they incorporate these into their practice alongside their nursing assessment of the patient. However, this practice has to be legitimated by the organisation and sanctioned by their medical colleagues. It could be argued that these practitioners were operating across traditional role boundaries, although the counter argument is that they operate within new boundaries for them but familiar boundaries for the doctor, who maintains control by ultimately sanctioning or extinguishing these behaviours (use of physical assessment skills).

Protocols and guidelines can be seen as methods to sanction yet limit the extent of the nurses' physical assessment skills in action.

The nurses also limited the extent to which they used the range of physical assessment to those with which they have the greatest affinity i.e. those linked to their specialist areas of practice and therefore those they used regularly. This provided the nurses with greater security in undertaking the activity and served to protect themselves from making potential errors in using unfamiliar, or under rehearsed physical assessment techniques. This indicated that they did not undertake comprehensive physical assessment of their patients but more intensive assessment of certain body systems. This process helped to cue them into aspects of pathophysiology in other systems that resulted in immediate referral back to their medical colleagues for resolution.

This evaluation did not include an economic review. However, the literature examining the health economics of nurses undertaking substitution or delegated roles, suggests that the economic benefits are at best cost neutral. Examples of cost savings made by the alumnae in this study had not been offset by the costs of training, funding for their posts nor the other variables included in such analysis. Although there is a growing impetus to increase the number of health economic evaluations of new roles, findings should be viewed with caution and the methodological rigour with which variables are counted in or excluded, the subject of significant scrutiny and critique.

Nurses who took on physical assessment skills found these created opportunities of working with their patients in ways that enabled them to provide longer and more consultations. This is considered to be of great benefit to the patients and their relatives especially in providing improved access to assessment of needs, changes to care plans, educational support, but as important care and concern.

Medical control over the use of physical assessment by nurses was evident, however, asymmetrical power shifted from doctor to nurse where experienced nurses assimilated these skills into their repertoire of care, that enabled them to enact their imperatives of patient advocacy and use their know how of the organisation to ensure the best outcomes for their patients.

The extent to which greater efficiency is achieved by teaching comprehensive physical assessment skills and techniques to more junior or pre registration students requires further research. These data indicate this would need to be limited to essential and core skills that can be rehearsed in simulation environments as well as in practice if they are to be retained competencies.

The way in which these nurses adopted physical assessment skills into their repertoire of care provides an illustration of the way in which workforce redesign can be achieved by expanding roles or moving tasks up or down the multidisciplinary ladder. Here, traditional medical tasks were transferred to nurses, whilst the medical teams maintained control. This did nothing to alter the cultural power held by medicine that continued to give permission for, or to deny this type of activity by the nurses.

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Appendix 1: Observation Schedule

Job title	
Alumnus Number	
Clinical context	GP Surgery Patient's home Walk in Clinic Other please specify
Reason for consultation	
Assessment process	
History taken	Yes No Comments
Physical Assessment Comments	Inspection Palpation Percussion Auscultation Vital signs Other investigations
Systems assessed	
Other health care professionals involved during the consultation	
Interpretation of findings	
Clinical decision actions	
Other health care professionals involved after the consultation	
Patient	Permission for further contact Yes / No Information and consent form given Yes / No Contact details